

Aren7US29CON.txt  
SEQUENCE LISTING

<110> Behan, Dominic P.  
Chalmers, Derek T.  
Lin, I-Lin  
Liaw, Chen W.  
Lehman-Bruinsma, Karin  
Lowitz, Kevin P.  
Dang, Huong T.  
Chen, Ruoping  
Gore, Martin  
White, Carol

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Aren7US29CON.txt

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 Tyr Arg Ala Lys Val Leu Ile Ala Val Ser Trp Ala Thr Ser Phe Cys  
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 Arg Ala Pro Gln Cys Val Phe Gly Tyr Thr Thr Asn Pro Gly Tyr Gln  
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 Ala Tyr Val Ile Leu Ile Ser Leu Ile Ser Phe Phe Ile Pro Phe Leu  
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 275 280 285  
 Ser Lys Leu Gly Leu Met Ser Leu Gln Arg Pro Phe Gln Met Ser Ile  
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 Ala Thr Phe Ser Lys His Phe Tyr Tyr Gln His Asn Phe Phe Glu Ile  
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 Ser Thr Trp Leu Leu Trp Leu Cys Tyr Leu Lys Ser Ala Leu Asn Pro  
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Aren7US29CON.txt

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 Tyr Ser Ser Gly Arg Val Phe Trp Thr Leu Ala Arg Pro Asp Ala Thr  
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 Gln Ser Gln Arg Arg Arg Lys Thr Val Arg Leu Leu Leu Ala Asn Leu  
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 Tyr Gly Leu Leu Arg Ser Lys Leu Val Ala Ala Ser Val Pro Ala Arg  
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 Asp Arg Val Arg Gly Val Leu Met Val Met Val Leu Leu Ala Gly Ala  
 275 280 285  
 Asn Cys Val Leu Asp Pro Leu Val Tyr Tyr Phe Ser Ala Glu Gly Phe  
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 Arg Asn Thr Leu Arg Gly Leu Gly Thr Pro His Arg Ala Arg Thr Ser  
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 Ala Thr Asn Gly Thr Arg Ala Ala Leu Ala Gln Ser Glu Arg Ser Ala  
 325 330 335  
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Aren7US29CON.txt

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 35 40 45

Leu Tyr Leu Ala His Leu Cys Val Val Asp Leu Leu Ala Ala Ala Ser  
 50 55 60

Ile Met Pro Leu Gly Leu Leu Ala Ala Pro Pro Pro Gly Leu Gly Arg  
 65 70 75 80

Val Arg Leu Gly Pro Ala Pro Cys Arg Ala Ala Arg Phe Leu Ser Ala  
 85 90 95

Ala Leu Leu Pro Ala Cys Thr Leu Gly Val Ala Ala Leu Gly Leu Ala  
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Arg Tyr Arg Leu Ile Val His Pro Leu Arg Pro Gly Ser Arg Pro Pro  
 115 120 125

Pro Val Leu Val Leu Thr Ala Val Trp Ala Ala Ala Gly Leu Leu Gly  
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Arg Cys Ser Val Leu Ala Gly Gly Leu Gly Pro Phe Arg Pro Leu Trp  
 165 170 175

Ala Leu Leu Ala Phe Ala Leu Pro Ala Leu Leu Leu Leu Gly Ala Tyr  
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Gly Gly Ile Phe Val Val Ala Arg Arg Ala Ala Leu Arg Pro Pro Arg  
 195 200 205

Pro Ala Arg Gly Ser Arg Leu Arg Ser Asp Ser Leu Asp Ser Arg Leu  
 210 215 220

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 225 230 235 240

Leu Ala Pro Ala Leu Ala Val Gly Gln Phe Ala Ala Cys Trp Leu Pro  
 245 250 255

Tyr Gly Cys Ala Cys Leu Ala Pro Ala Ala Arg Ala Ala Glu Ala Glu  
 260 265 270

Ala Ala Val Thr Trp Val Ala Tyr Ser Ala Phe Ala Ala His Pro Phe  
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Leu Tyr Gly Leu Leu Gln Arg Pro Val Arg Leu Ala Leu Gly Arg Leu  
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Ser Arg Arg Ala Leu Pro Gly Pro Val Arg Ala Cys Thr Pro Gln Ala  
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Aren7US29CON.txt

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Val Ala Asp Thr Leu Ile Gly Val Ala Ile Ser Gly Leu Leu Thr Asp  
50 55 60

Gln Leu Ser Ser Pro Ser Arg Pro Thr Gln Lys Thr Leu Cys Ser Leu  
65 70 75 80

Arg Met Ala Phe Val Thr Ser Ser Ala Ala Ala Ser Val Leu Thr Val  
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Met Leu Ile Thr Phe Asp Arg Tyr Leu Ala Ile Lys Gln Pro Phe Arg  
100 105 110

Tyr Leu Lys Ile Met Ser Gly Phe Val Ala Gly Ala Cys Ile Ala Gly  
115 120 125

Leu Trp Leu Val Ser Tyr Leu Ile Gly Phe Leu Pro Leu Gly Ile Pro  
130 135 140

Met Phe Gln Gln Thr Ala Tyr Lys Gly Gln Cys Ser Phe Phe Ala Val  
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Phe His Pro His Phe Val Leu Thr Leu Ser Cys Val Gly Phe Phe Pro  
165 170 175

Ala Met Leu Leu Phe Val Phe Phe Tyr Cys Asp Met Leu Lys Ile Ala  
180 185 190

Ser Met His Ser Gln Gln Ile Arg Lys Met Glu His Ala Gly Ala Met  
195 200 205

Ala Gly Gly Tyr Arg Ser Pro Arg Thr Pro Ser Asp Phe Lys Ala Leu  
210 215 220

Arg Thr Val Ser Val Leu Ile Gly Ser Phe Ala Leu Ser Trp Thr Pro  
225 230 235 240

Phe Leu Ile Thr Gly Ile Val Gln Val Ala Cys Gln Glu Cys His Leu  
245 250 255

Tyr Leu Val Leu Glu Arg Tyr Leu Trp Leu Leu Gly Val Gly Asn Ser  
260 265 270

Leu Leu Asn Pro Leu Ile Tyr Ala Tyr Trp Gln Lys Glu Val Arg Leu  
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Gln Leu Tyr His Met Ala Leu Gly Val Lys Lys Val Leu Thr Ser Phe  
290 295 300

Leu Leu Phe Leu Ser Ala Arg Asn Cys Gly Pro Glu Arg Pro Arg Glu  
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Aren7US29CON.txt

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 Leu Met Ala Trp Leu Ala Gly Ser Gln Ala Arg His Gly Ala Gly Thr  
 50 55 60  
 Arg Leu Ala Leu Leu Leu Ser Leu Ala Leu Ser Asp Phe Leu Phe  
 65 70 75 80  
 Leu Ala Ala Ala Ala Phe Gln Ile Leu Glu Ile Arg His Gly Gly His  
 85 90 95  
 Trp Pro Leu Gly Thr Ala Ala Cys Arg Phe Tyr Tyr Phe Leu Trp Gly  
 100 105 110  
 Val Ser Tyr Ser Ser Gly Leu Phe Leu Leu Ala Ala Leu Ser Leu Asp  
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 Arg Cys Leu Leu Ala Leu Cys Pro His Trp Tyr Pro Gly His Arg Pro  
 130 135 140  
 Val Arg Leu Pro Leu Trp Val Cys Ala Gly Val Trp Val Leu Ala Thr  
 145 150 155 160  
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 165 170 175  
 Tyr Asp Leu Val Ile Cys Leu Asp Phe Trp Asp Ser Glu Glu Leu Ser  
 180 185 190  
 Leu Arg Met Leu Glu Val Leu Gly Gly Phe Leu Pro Phe Leu Leu Leu  
 195 200 205  
 Leu Val Cys His Val Leu Thr Gln Ala Thr Arg Thr Cys His Arg Gln  
 210 215 220  
 Gln Gln Pro Ala Ala Cys Arg Gly Phe Ala Arg Val Ala Arg Thr Ile  
 225 230 235 240  
 Leu Ser Ala Tyr Val Val Leu Arg Leu Pro Tyr Gln Leu Ala Gln Leu  
 245 250 255  
 Leu Tyr Leu Ala Phe Leu Trp Asp Val Tyr Ser Gly Tyr Leu Leu Trp  
 260 265 270  
 Glu Ala Leu Val Tyr Ser Asp Tyr Leu Ile Leu Leu Asn Ser Cys Leu  
 275 280 285

Aren7US29CON.txt

Ser Pro Phe Leu Cys Leu Met Ala Ser Ala Asp Leu Arg Thr Leu Leu  
290 295 300

Arg Ser Val Leu Ser Ser Phe Ala Ala Ala Leu Cys Glu Glu Arg Pro  
305 310 315 320

Gly Ser Phe Thr Pro Thr Glu Pro Gln Thr Gln Leu Asp Ser Glu Gly  
325 330 335

Pro Thr Leu Pro Glu Pro Met Ala Glu Ala Gln Ser Gln Met Asp Pro  
340 345 350

Val Ala Gln Pro Gln Val Asn Pro Thr Leu Gln Pro Arg Ser Asp Pro  
355 360 365

Thr Ala Gln Pro Gln Leu Asn Pro Thr Ala Gln Pro Gln Ser Asp Pro  
370 375 380

Thr Ala Gln Pro Gln Leu Asn Leu Met Ala Gln Pro Gln Ser Asp Ser  
385 390 395 400

Val Ala Gln Pro Gln Ala Asp Thr Asn Val Gln Thr Pro Ala Pro Ala  
405 410 415

Ala Ser Ser Val Pro Ser Pro Cys Asp Glu Ala Ser Pro Thr Pro Ser  
420 425 430

Ser His Pro Thr Pro Gly Ala Leu Glu Asp Pro Ala Thr Pro Pro Ala  
435 440 445

Ser Glu Gly Glu Ser Pro Ser Ser Thr Pro Pro Glu Ala Ala Pro Gly  
450 455 460

Ala Gly Pro Thr  
465

<210> 11  
<211> 1248  
<212> DNA  
<213> Homo sapiens

<400> 11  
atgtcagggg tggaaaaact tcagaatgct tcctggatct accagcagaa actagaagat 60  
ccattccaga aacacctgaa cagcaccgag gagtatctgg ccttcctctg cggacctcgg 120  
cgcagccact tcttcctccc cgtgtctgtg gtgtatgtgc caatttttgt ggtgggggtc 180  
attggcaatg tcctgggtgtg cctgggtgatt ctgcagcacc aggctatgaa gacgcccacc 240  
aactactacc tcttcagcct ggcggtctct gacctcctgg tcctgtctct tggaatgccc 300  
ctggaggtct atgagatgtg gcgcaactac cttttcttgt tcgggcccgt gggctgtctac 360  
ttcaagacgg ccctctttga gaccgtgtgc ttcgcctcca tcctcagcat caccaccgtc 420  
agcgtggagc gctacgtggc catctacac ccgttccgcg ccaaactgca gagcaccg 480

## Aren7US29CON.txt

```

cgccggggccc tcaggatcct cggcatcgtc tggggcttct ccgtgctctt ctccctgccc 540
aacaccagca tccatggcat caagttccac tacttcccca atgggtccct ggtcccaggt 600
tcggccacct gtacgggtcat caagcccattg tggatctaca atttcatcat ccaggtcacc 660
tccttcttat tctacctcct ccccatgact gtcatcagtg tcctctacta cctcatggca 720
ctcagactaa agaaagacaa atctcttgag gcagatgaag ggaatgcaaa tattcaaaga 780
ccctgcagaa aatcagtcaa caagatgctg tttgtcttgg tcttagtggt tgctatctgt 840
tgggccccgt tccacattga ccgactcttc ttcagctttg tggaggagtg gagtgaatcc 900
ctgggtgctg tgttcaacct cgtccatgtg gtgtcaggtg tcttcttcta cctgagctca 960
gctgtcaacc ccattatcta taacctactg tctcgccgct tccaggcagc attccagaat 1020
gtgatctctt ctttccacaa acagtggcac tcccagcatg acccacagtt gccacctgcc 1080
cagcgggaaca tcttctgac agaatgccac tttgtggagc tgaccgaaga tataggtccc 1140
caattcccat gtcagtcatt catgcacaac tctcacctcc caacagccct ctctagtga 1200
cagatgtcaa gaacaaacta tcaaagcttc cactttaaca aaacctga 1248

```

```

<210> 12
<211> 415
<212> PRT
<213> Homo sapiens

```

```
<400> 12
```

```
Met Ser Gly Met Glu Lys Leu Gln Asn Ala Ser Trp Ile Tyr Gln Gln
1 5 10 15
```

```
Lys Leu Glu Asp Pro Phe Gln Lys His Leu Asn Ser Thr Glu Glu Tyr
20 25 30
```

```
Leu Ala Phe Leu Cys Gly Pro Arg Arg Ser His Phe Phe Leu Pro Val
35 40 45
```

```
Ser Val Val Tyr Val Pro Ile Phe Val Val Gly Val Ile Gly Asn Val
50 55 60
```

```
Leu Val Cys Leu Val Ile Leu Gln His Gln Ala Met Lys Thr Pro Thr
65 70 75 80
```

```
Asn Tyr Tyr Leu Phe Ser Leu Ala Val Ser Asp Leu Leu Val Leu Leu
85 90 95
```

```
Leu Gly Met Pro Leu Glu Val Tyr Glu Met Trp Arg Asn Tyr Pro Phe
100 105 110
```

```
Leu Phe Gly Pro Val Gly Cys Tyr Phe Lys Thr Ala Leu Phe Glu Thr
115 120 125
```

```
Val Cys Phe Ala Ser Ile Leu Ser Ile Thr Thr Val Ser Val Glu Arg
130 135 140
```

Tyr Val Ala Ile Leu His Pro Phe Arg Ala Lys Leu Gln Ser Thr Arg  
145 150 155 160

Arg Arg Ala Leu Arg Ile Leu Gly Ile Val Trp Gly Phe Ser Val Leu  
165 170 175

Phe Ser Leu Pro Asn Thr Ser Ile His Gly Ile Lys Phe His Tyr Phe  
180 185 190

Pro Asn Gly Ser Leu Val Pro Gly Ser Ala Thr Cys Thr Val Ile Lys  
195 200 205

Pro Met Trp Ile Tyr Asn Phe Ile Ile Gln Val Thr Ser Phe Leu Phe  
210 215 220

Tyr Leu Leu Pro Met Thr Val Ile Ser Val Leu Tyr Tyr Leu Met Ala  
225 230 235 240

Leu Arg Leu Lys Lys Asp Lys Ser Leu Glu Ala Asp Glu Gly Asn Ala  
245 250 255

Asn Ile Gln Arg Pro Cys Arg Lys Ser Val Asn Lys Met Leu Phe Val  
260 265 270

Leu Val Leu Val Phe Ala Ile Cys Trp Ala Pro Phe His Ile Asp Arg  
275 280 285

Leu Phe Phe Ser Phe Val Glu Glu Trp Ser Glu Ser Leu Ala Ala Val  
290 295 300

Phe Asn Leu Val His Val Val Ser Gly Val Phe Phe Tyr Leu Ser Ser  
305 310 315 320

Ala Val Asn Pro Ile Ile Tyr Asn Leu Leu Ser Arg Arg Phe Gln Ala  
325 330 335

Ala Phe Gln Asn Val Ile Ser Ser Phe His Lys Gln Trp His Ser Gln  
340 345 350

His Asp Pro Gln Leu Pro Pro Ala Gln Arg Asn Ile Phe Leu Thr Glu  
355 360 365

Cys His Phe Val Glu Leu Thr Glu Asp Ile Gly Pro Gln Phe Pro Cys  
370 375 380

Gln Ser Ser Met His Asn Ser His Leu Pro Thr Ala Leu Ser Ser Glu  
385 390 395 400

Gln Met Ser Arg Thr Asn Tyr Gln Ser Phe His Phe Asn Lys Thr  
405 410 415

<210> 13  
<211> 1173

## Aren7US29CON.txt

<212> DNA  
 <213> Homo sapiens

<400> 13  
 atgccagata ctaatagcac aatcaattta tcactaagca ctctgtgttac tttagcattt 60  
 tttatgtcct tagtagcttt tgctataatg ctaggaaatg ctttggtcat tttagctttt 120  
 gtggtggaca aaaaccttag acatcgaagt agttatTTTT ttcttaactt ggccatctct 180  
 gacttctttg tgggtgtgat ctccattcct ttgtacatcc ctcacacgct gttcgaatgg 240  
 gattttggaa aggaaatctg tgtatTTTtg ctcactactg actatctgtt atgtacagca 300  
 tctgtatata acattgtcct catcagctat gatcgatacc tgtcagtcct aaatgctgtg 360  
 tcttatagaa ctcaacatac tggggtcttg aagattgtta ctctgatggg ggccgtttgg 420  
 gtgctggcct tcttagtgaa tgggccaatg attctagttt cagagtcttg gaaggatgaa 480  
 ggtagtgaat gtgaacctgg atTTTTttcg gaatggtaca tccttgccat cacatcattc 540  
 ttggaattcg tgatcccagt catcttagtc gcttatttca acatgaatat ttattggagc 600  
 ctgtggaagc gtgatcatct cagtaggtgc caaagccatc ctggactgac tgctgtctct 660  
 tccaacatct gtggacactc attcagaggt agactatctt caaggagatc tctttctgca 720  
 tcgacagaag ttcctgcatc ctttcattca gagagacaga ggagaaagag tagtctcatg 780  
 ttttctcaa gaaccaagat gaatagcaat acaattgctt ccaaaatggg ttccttctcc 840  
 caatcagatt ctgtagctct tcaccaaagg gaacatgttg aactgcttag agccaggaga 900  
 ttagccaagt cactggccat tctcttaggg gtttttgctg tttgctgggc tccatattct 960  
 ctgttcacaa ttgtcctttc attttattcc tcagcaacag gtcctaaatc agtttggtat 1020  
 agaattgcat tttggcttca gtggttcaat tcctttgtca atcctctttt gtatccattg 1080  
 tgtcacaagc gctttcaaaa ggctttcttg aaaatatttt gtataaaaaa gcaacctcta 1140  
 ccatcacaac acagtcgggc agtatcttct taa 1173

<210> 14  
 <211> 390  
 <212> PRT  
 <213> Homo sapiens

<400> 14  
 Met Pro Asp Thr Asn Ser Thr Ile Asn Leu Ser Leu Ser Thr Arg Val  
 1 5 10 15  
 Thr Leu Ala Phe Phe Met Ser Leu Val Ala Phe Ala Ile Met Leu Gly  
 20 25 30  
 Asn Ala Leu Val Ile Leu Ala Phe Val Val Asp Lys Asn Leu Arg His  
 35 40 45  
 Arg Ser Ser Tyr Phe Phe Leu Asn Leu Ala Ile Ser Asp Phe Phe Val  
 50 55 60  
 Gly Val Ile Ser Ile Pro Leu Tyr Ile Pro His Thr Leu Phe Glu Trp  
 65 70 75 80



Asp Phe Gly Lys Glu Ile Cys Val Phe Trp Leu Thr Thr Asp Tyr Leu  
 85 90 95  
 Leu Cys Thr Ala Ser Val Tyr Asn Ile Val Leu Ile Ser Tyr Asp Arg  
 100 105 110  
 Tyr Leu Ser Val Ser Asn Ala Val Ser Tyr Arg Thr Gln His Thr Gly  
 115 120 125  
 Val Leu Lys Ile Val Thr Leu Met Val Ala Val Trp Val Leu Ala Phe  
 130 135 140  
 Leu Val Asn Gly Pro Met Ile Leu Val Ser Glu Ser Trp Lys Asp Glu  
 145 150 155 160  
 Gly Ser Glu Cys Glu Pro Gly Phe Phe Ser Glu Trp Tyr Ile Leu Ala  
 165 170 175  
 Ile Thr Ser Phe Leu Glu Phe Val Ile Pro Val Ile Leu Val Ala Tyr  
 180 185 190  
 Phe Asn Met Asn Ile Tyr Trp Ser Leu Trp Lys Arg Asp His Leu Ser  
 195 200 205  
 Arg Cys Gln Ser His Pro Gly Leu Thr Ala Val Ser Ser Asn Ile Cys  
 210 215 220  
 Gly His Ser Phe Arg Gly Arg Leu Ser Ser Arg Arg Ser Leu Ser Ala  
 225 230 235 240  
 Ser Thr Glu Val Pro Ala Ser Phe His Ser Glu Arg Gln Arg Arg Lys  
 245 250 255  
 Ser Ser Leu Met Phe Ser Ser Arg Thr Lys Met Asn Ser Asn Thr Ile  
 260 265 270  
 Ala Ser Lys Met Gly Ser Phe Ser Gln Ser Asp Ser Val Ala Leu His  
 275 280 285  
 Gln Arg Glu His Val Glu Leu Leu Arg Ala Arg Arg Leu Ala Lys Ser  
 290 295 300  
 Leu Ala Ile Leu Leu Gly Val Phe Ala Val Cys Trp Ala Pro Tyr Ser  
 305 310 315 320  
 Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys  
 325 330 335  
 Ser Val Trp Tyr Arg Ile Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe  
 340 345 350

Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala  
 355 360 365

Phe Leu Lys Ile Phe Cys Ile Lys Lys Gln Pro Leu Pro Ser Gln His  
 370 375 380

Ser Arg Ser Val Ser Ser  
 385 390

<210> 15  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 15  
 ggaaagctta acgatcccca ggagcaacat 30

<210> 16  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 16  
 ctgggatcct acgagagcat ttttcacaca g 31

<210> 17  
 <211> 1128  
 <212> DNA  
 <213> Homo sapiens

<400> 17  
 atggcgaacg cgagcgagcc ggggtggcagc ggcggcgggc aggcggccgc cctgggcctc 60  
 aagctggcca cgctcagcct gctgctgtgc gtgagcctag cgggcaacgt gctgttcgcg 120  
 ctgctgatcg tgcgggagcg cagcctgcac cgcgccccgt actacctgct gctcgacctg 180  
 tgcttggcgg acgggctgcg cgcgctcgcc tgcttcccgg ccgtcatgct ggcggcgcg 240  
 cgtgcggcgg ccgcggcggg ggcgcccggc ggcgcgctgg gctgcaagct gctcgccttc 300  
 ctggccgcgc tcttctgctt ccacgccgcc ttcctgctgc tgggctgagg cgtaaccgc 360  
 tacctggcca tcgcgcacca ccgcttctat gcagagcgcc tggccggctg gccgtgcgcc 420  
 gccatgctgg tgtgcgccgc ctgggcgctg gcgctggccg cggccttccc gccagtgtg 480  
 gacggcggtg gcgacgacga ggacgcgccc tgcgccctgg agcagcgccc cgacggcgcc 540  
 cccggcgcgc tgggcttcct gctgctgctg gccgtggtgg tgggcgccac gcacctgctc 600  
 tacctccgcc tgctcttctt catccacgac cgccgcaaga tgcggcccgc gcgcctggtg 660  
 cccgccgtca gccacgactg gaccttccac ggcccgggcg ccaccggcca ggcggccgcc 720  
 aactggacgg cgggcttcgg ccgcggggcc acgccgccc cgcttggtgg catccggccc 780  
 gcagggccgg gccgcggcgc gcgccgcctc ctcgtgctgg aagaattcaa gacggagaag 840

## Aren7US29CON.txt

```

aggctgtgca agatgttcta cgccgtcacg ctgctcttcc tgctcctctg ggggccctac    900
gtcgtggcca gctacctgcg ggtcctggtg cggcccggcg ccgtcccca ggcctacctg    960
acggcctccg tgtggctgac cttcgcgcag gccggcatca acccgcgtcg gtgcttcctc   1020
ttcaacaggg agctgagggg ctgcttcagg gccagttcc cctgctgcca gagcccccg   1080
accaccagg cgacccatcc ctgcgacctg aaaggcattg gtttatga                1128

```

```

<210> 18
<211> 375
<212> PRT
<213> Homo sapiens

```

```

<400> 18

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```

Met Ala Asn Ala Ser Glu Pro Gly Gly Ser Gly Gly Glu Ala Ala
1      5      10     15

```

```

Ala Leu Gly Leu Lys Leu Ala Thr Leu Ser Leu Leu Leu Cys Val Ser
20     25     30

```

```

Leu Ala Gly Asn Val Leu Phe Ala Leu Leu Ile Val Arg Glu Arg Ser
35     40     45

```

```

Leu His Arg Ala Pro Tyr Tyr Leu Leu Leu Asp Leu Cys Leu Ala Asp
50     55     60

```

```

Gly Leu Arg Ala Leu Ala Cys Leu Pro Ala Val Met Leu Ala Ala Arg
65     70     75     80

```

```

Arg Ala Ala Ala Ala Ala Gly Ala Pro Pro Gly Ala Leu Gly Cys Lys
85     90     95

```

```

Leu Leu Ala Phe Leu Ala Ala Leu Phe Cys Phe His Ala Ala Phe Leu
100    105    110

```

```

Leu Leu Gly Val Gly Val Thr Arg Tyr Leu Ala Ile Ala His His Arg
115    120    125

```

```

Phe Tyr Ala Glu Arg Leu Ala Gly Trp Pro Cys Ala Ala Met Leu Val
130    135    140

```

```

Cys Ala Ala Trp Ala Leu Ala Leu Ala Ala Ala Phe Pro Pro Val Leu
145    150    155    160

```

```

Asp Gly Gly Gly Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu Gln Arg
165    170    175

```

```

Pro Asp Gly Ala Pro Gly Ala Leu Gly Phe Leu Leu Leu Leu Ala Val
180    185    190

```

```

Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe Phe Ile
195    200    205

```

Aren7US29CON.txt

His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala Val Ser  
210 215 220

His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala Ala Ala  
225 230 235 240

Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala Leu Val  
245 250 255

Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu Leu Val  
260 265 270

Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe Tyr Ala  
275 280 285

Val Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val Ala Ser  
290 295 300

Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala Tyr Leu  
305 310 315 320

Thr Ala Ser Val Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn Pro Val  
325 330 335

Val Cys Phe Leu Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg Ala Gln  
340 345 350

Phe Pro Cys Cys Gln Ser Pro Arg Thr Thr Gln Ala Thr His Pro Cys  
355 360 365

Asp Leu Lys Gly Ile Gly Leu  
370 375

<210> 19  
<211> 1002  
<212> DNA  
<213> Homo sapiens

<400> 19  
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atagtacagc tgggtattccc agccctctac acagtgggtt tcttgaccgg catcctgctg 120  
aatacttttg ctctgtgggt gtttgttcac atccccagct cctccacctt catcatctac 180  
ctcaaaaaca ctttggtggc cgacttgata atgacactca tgcttccttt caaaatcctc 240  
tctgactcac aactggcacc ctggcagctc agagcttttg tgtgtcgttt ttcttcggtg 300  
atattttatg agaccatgta tgtgggcatc gtgctgttag ggctcatagc ctttgacaga 360  
ttcctcaaga tcatcagacc tttgagaaat atttttctaa aaaaacctgt ttttgcaaaa 420  
acgggtctcaa tcttcatctg gttctttttg ttcttcatct ccctgccaaa tacgatcttg 480  
agcaacaagg aagcaacacc atcgtctgtg aaaaagtgtg cttccttaaa ggggcctctg 540  
gggctgaaat ggcatacaat ggtaaataac atatgccagt ttattttctg gactgttttt 600

## Aren7US29CON.txt

atcctaatgc ttgtgtttta tgtggttatt gcaaaaaaag tatatgattc ttatagaaag 660  
 tccaaaagta aggacagaaa aaacaacaaa aagctggaag gcaaagtatt tgttgtcgtg 720  
 gctgtcttct ttgtgtgttt tgctccattt cattttgccg gagttccata tactcacagt 780  
 caaaccaaca ataagactga ctgtagactg caaaatcaac tgtttattgc taaagaaaca 840  
 actctctttt tggcagcaac taacatttgt atggatccct taatatacat attcttatgt 900  
 aaaaaattca cagaaaagct accatgtatg caagggagaa agaccacagc atcaagccaa 960  
 gaaaatcata gcagtcagac agacaacata accttaggct ga 1002

<210> 20  
 <211> 333  
 <212> PRT  
 <213> Homo sapiens

<400> 20

Met Asn Thr Thr Val Met Gln Gly Phe Asn Arg Ser Glu Arg Cys Pro  
 1 5 10 15

Arg Asp Thr Arg Ile Val Gln Leu Val Phe Pro Ala Leu Tyr Thr Val  
 20 25 30

Val Phe Leu Thr Gly Ile Leu Leu Asn Thr Leu Ala Leu Trp Val Phe  
 35 40 45

Val His Ile Pro Ser Ser Ser Thr Phe Ile Ile Tyr Leu Lys Asn Thr  
 50 55 60

Leu Val Ala Asp Leu Ile Met Thr Leu Met Leu Pro Phe Lys Ile Leu  
 65 70 75 80

Ser Asp Ser His Leu Ala Pro Trp Gln Leu Arg Ala Phe Val Cys Arg  
 85 90 95

Phe Ser Ser Val Ile Phe Tyr Glu Thr Met Tyr Val Gly Ile Val Leu  
 100 105 110

Leu Gly Leu Ile Ala Phe Asp Arg Phe Leu Lys Ile Ile Arg Pro Leu  
 115 120 125

Arg Asn Ile Phe Leu Lys Lys Pro Val Phe Ala Lys Thr Val Ser Ile  
 130 135 140

Phe Ile Trp Phe Phe Leu Phe Phe Ile Ser Leu Pro Asn Thr Ile Leu  
 145 150 155 160

Ser Asn Lys Glu Ala Thr Pro Ser Ser Val Lys Lys Cys Ala Ser Leu  
 165 170 175

Lys Gly Pro Leu Gly Leu Lys Trp His Gln Met Val Asn Asn Ile Cys  
 180 185 190

Gln Phe Ile Phe Trp Thr Val Phe Ile Leu Met Leu Val Phe Tyr Val  
 195 200 205

Val Ile Ala Lys Lys Val Tyr Asp Ser Tyr Arg Lys Ser Lys Ser Lys  
 210 215 220

Asp Arg Lys Asn Asn Lys Lys Leu Glu Gly Lys Val Phe Val Val Val  
 225 230 235 240

Ala Val Phe Phe Val Cys Phe Ala Pro Phe His Phe Ala Arg Val Pro  
 245 250 255

Tyr Thr His Ser Gln Thr Asn Asn Lys Thr Asp Cys Arg Leu Gln Asn  
 260 265 270

Gln Leu Phe Ile Ala Lys Glu Thr Thr Leu Phe Leu Ala Ala Thr Asn  
 275 280 285

Ile Cys Met Asp Pro Leu Ile Tyr Ile Phe Leu Cys Lys Lys Phe Thr  
 290 295 300

Glu Lys Leu Pro Cys Met Gln Gly Arg Lys Thr Thr Ala Ser Ser Gln  
 305 310 315 320

Glu Asn His Ser Ser Gln Thr Asp Asn Ile Thr Leu Gly  
 325 330

<210> 21  
 <211> 1122  
 <212> DNA  
 <213> Homo sapiens

<400> 21  
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 tcagcttatg tgaagctggt actgctggga ctgattatgt gcgtgagcct ggcgggtaac 120  
 gccatcttgt ccctgctggt gctcaaggag cgtgccctgc acaaggctcc ttactacttc 180  
 ctgctggacc tgtgcctggc cgatggcata cgctctgccg tctgcttccc ctttgtgctg 240  
 gcttctgtgc gccacggctc ttcattggacc ttcagtgcac tcagctgcaa gattgtggcc 300  
 tttatggccg tgctcttttg cttccatgcg gccttcatgc tgttctgcat cagcgtcacc 360  
 cgctacatgg ccatcgccca ccaccgcttc tacgccaagc gcatgacact ctggacatgc 420  
 gcggctgtca tctgcatggc ctggaccctg tctgtggcca tggccttccc acctgtcttt 480  
 gacgtgggca cctacaagtt tattcgggag gaggaccagt gcatctttga gcatcgctac 540  
 ttcaaggcca atgacacgct gggcttcatg cttatgttgg ctgtgctcat ggcagctacc 600  
 catgctgtct acggcaagct gctcctcttc gagtatcgtc accgcaagat gaagccagtg 660  
 cagatggtgc cagccatcag ccagaactgg acattccatg gtcccggggc caccggccag 720  
 gctgctgcca actggatcgc cggctttggc cggtggccca tgccaccaac cctgctgggt 780  
 atccggcaga atgggcatgc agccagccgg cggctactgg gcatggacga ggtcaagggt 840

## Aren7US29CON.txt

gaaaagcagc tgggccgcat gttctacgcg atcacactgc tctttctgct cctctgggtca 900  
 ccctacatcg tggcctgcta ctggcgagtg tttgtgaaag cctgtgctgt gccccaccgc 960  
 tacctggcca ctgctgtttg gatgagcttc gcccgaggctg ccgtcaaccc aattgtctgc 1020  
 ttctgtctca acaaggacct caagaagtgc ctgaccactc acgccccctg ctggggcaca 1080  
 ggaggtgccc cggctcccag agaaccctac tgtgtcatgt ga 1122

<210> 22  
 <211> 373  
 <212> PRT  
 <213> Homo sapiens

<400> 22

Met Ala Asn Thr Thr Gly Glu Pro Glu Glu Val Ser Gly Ala Leu Ser  
 1 5 10 15

Pro Pro Ser Ala Ser Ala Tyr Val Lys Leu Val Leu Leu Gly Leu Ile  
 20 25 30

Met Cys Val Ser Leu Ala Gly Asn Ala Ile Leu Ser Leu Leu Val Leu  
 35 40 45

Lys Glu Arg Ala Leu His Lys Ala Pro Tyr Tyr Phe Leu Leu Asp Leu  
 50 55 60

Cys Leu Ala Asp Gly Ile Arg Ser Ala Val Cys Phe Pro Phe Val Leu  
 65 70 75 80

Ala Ser Val Arg His Gly Ser Ser Trp Thr Phe Ser Ala Leu Ser Cys  
 85 90 95

Lys Ile Val Ala Phe Met Ala Val Leu Phe Cys Phe His Ala Ala Phe  
 100 105 110

Met Leu Phe Cys Ile Ser Val Thr Arg Tyr Met Ala Ile Ala His His  
 115 120 125

Arg Phe Tyr Ala Lys Arg Met Thr Leu Trp Thr Cys Ala Ala Val Ile  
 130 135 140

Cys Met Ala Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Phe  
 145 150 155 160

Asp Val Gly Thr Tyr Lys Phe Ile Arg Glu Glu Asp Gln Cys Ile Phe  
 165 170 175

Glu His Arg Tyr Phe Lys Ala Asn Asp Thr Leu Gly Phe Met Leu Met  
 180 185 190

Leu Ala Val Leu Met Ala Ala Thr His Ala Val Tyr Gly Lys Leu Leu  
 195 200 205

## Aren7US29CON.txt

Leu Phe Glu Tyr Arg His Arg Lys Met Lys Pro Val Gln Met Val Pro  
 210 215 220

Ala Ile Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln  
 225 230 235 240

Ala Ala Ala Asn Trp Ile Ala Gly Phe Gly Arg Gly Pro Met Pro Pro  
 245 250 255

Thr Leu Leu Gly Ile Arg Gln Asn Gly His Ala Ala Ser Arg Arg Leu  
 260 265 270

Leu Gly Met Asp Glu Val Lys Gly Glu Lys Gln Leu Gly Arg Met Phe  
 275 280 285

Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val  
 290 295 300

Ala Cys Tyr Trp Arg Val Phe Val Lys Ala Cys Ala Val Pro His Arg  
 305 310 315 320

Tyr Leu Ala Thr Ala Val Trp Met Ser Phe Ala Gln Ala Ala Val Asn  
 325 330 335

Pro Ile Val Cys Phe Leu Leu Asn Lys Asp Leu Lys Lys Cys Leu Thr  
 340 345 350

Thr His Ala Pro Cys Trp Gly Thr Gly Gly Ala Pro Ala Pro Arg Glu  
 355 360 365

Pro Tyr Cys Val Met  
 370

<210> 23  
 <211> 1053  
 <212> DNA  
 <213> Homo sapiens

<400> 23  
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 aaagttttcc tccctgtatt cctcacaata gctttcgtca ttggacttgc aggcaattcc 180  
 atggtagtgg caatttatgc ctattacaag aaacagagaa ccaaaacaga tgtgtacatc 240  
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 gcagttcatg ggtgggtttt agggaaaata atgtgcaaaa taacttcagc cttgtacaca 360  
 ctaaactttg tctctggaat gcagtttctg gcttgcatca gcatagacag atatgtggca 420  
 gtaactaatg tccccagcca atcaggagtg ggaaaaccat gctggatcat ctgtttctgt 480  
 gtctggatgg ctgccatctt gctgagcata cccagctgg ttttttatac agtaaagac 540  
 aatgctaggt gcattcccat tttccccgcg tacctaggaa catcaatgaa agcattgatt 600



## Aren7US29CON.txt

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caaatgctag agatctgcat tggatttgta gtaccctttc ttattatggg ggtgtgctac 660
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gttctgctca cagtcgttat agttttcatt gtcactcaac tgccttataa cattgtcaag 780
ttctgccgag ccatagacat catctactcc ctgatcacca gctgcaacat gagcaaacgc 840
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atcctttatg tttttatggg agcatctttc aaaaactacg ttatgaaagt ggccaagaaa 960
tatgggtcct ggagaagaca gagacaaagt gtggaggagt ttccttttga ttctgagggg 1020
cctacagagc caaccagtac ttttagcatt taa 1053

```

```

<210> 24
<211> 350
<212> PRT
<213> Homo sapiens

```

```
<400> 24
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```

Met Ala Leu Glu Gln Asn Gln Ser Thr Asp Tyr Tyr Tyr Glu Glu Asn
1      5      10      15

```

```

Glu Met Asn Gly Thr Tyr Asp Tyr Ser Gln Tyr Glu Leu Ile Cys Ile
20      25      30

```

```

Lys Glu Asp Val Arg Glu Phe Ala Lys Val Phe Leu Pro Val Phe Leu
35      40      45

```

```

Thr Ile Ala Phe Val Ile Gly Leu Ala Gly Asn Ser Met Val Val Ala
50      55      60

```

```

Ile Tyr Ala Tyr Tyr Lys Lys Gln Arg Thr Lys Thr Asp Val Tyr Ile
65      70      75      80

```

```

Leu Asn Leu Ala Val Ala Asp Leu Leu Leu Leu Phe Thr Leu Pro Phe
85      90      95

```

```

Trp Ala Val Asn Ala Val His Gly Trp Val Leu Gly Lys Ile Met Cys
100     105     110

```

```

Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe Val Ser Gly Met Gln
115     120     125

```

```

Phe Leu Ala Cys Ile Ser Ile Asp Arg Tyr Val Ala Val Thr Asn Val
130     135     140

```

```

Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp Ile Ile Cys Phe Cys
145     150     155     160

```

```

Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro Gln Leu Val Phe Tyr
165     170     175

```

```

Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile Phe Pro Arg Tyr Leu
180     185     190

```

Aren7US29CON.txt

Gly Thr Ser Met Lys Ala Leu Ile Gln Met Leu Glu Ile Cys Ile Gly  
195 200 205

Phe Val Val Pro Phe Leu Ile Met Gly Val Cys Tyr Phe Ile Thr Ala  
210 215 220

Arg Thr Leu Met Lys Met Pro Asn Ile Lys Ile Ser Arg Pro Leu Lys  
225 230 235 240

Val Leu Leu Thr Val Val Ile Val Phe Ile Val Thr Gln Leu Pro Tyr  
245 250 255

Asn Ile Val Lys Phe Cys Arg Ala Ile Asp Ile Ile Tyr Ser Leu Ile  
260 265 270

Thr Ser Cys Asn Met Ser Lys Arg Met Asp Ile Ala Ile Gln Val Thr  
275 280 285

Glu Ser Ile Ala Leu Phe His Ser Cys Leu Asn Pro Ile Leu Tyr Val  
290 295 300

Phe Met Gly Ala Ser Phe Lys Asn Tyr Val Met Lys Val Ala Lys Lys  
305 310 315 320

Tyr Gly Ser Trp Arg Arg Gln Arg Gln Ser Val Glu Glu Phe Pro Phe  
325 330 335

Asp Ser Glu Gly Pro Thr Glu Pro Thr Ser Thr Phe Ser Ile  
340 345 350

<210> 25  
<211> 1116  
<212> DNA  
<213> Homo sapiens

<400> 25  
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agcgcggtgt gcacgctggg ggtgccggcc aactgcctga ctgcgtggct ggcgctgctg 180  
caggtactgc agggcaacgt gctggccgtc tacctgctct gcctggcact ctgcgaactg 240  
ctgtacacag gcacgctgcc actctgggtc atctatatcc gcaaccagca ccgctggacc 300  
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gtcgggatcg ttactaccc ggtgttccag acggaagaca aggagacctg ctttgacatg 540  
ctgcagatgg acagcaggat tgccgggtac tactacgcca ggttcaccgt tggctttgcc 600  
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Aren7US29CON.txt

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tcctactaca gaggagacag gaacgccatg tgcggcttgg aggaaaggct gtacacagcc 840  
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ctggccacgg accattcccc ccaagaagtg tccagaatcc ataaggggtg gaaagagtgg 960  
tccatgaaga cagacgtcac caggctcacc cacagcaggg acaccgagga gctgcagtcg 1020  
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tgccctgcaa agaggctgat tgaggagtcc tgctga 1116

<210> 26  
<211> 371  
<212> PRT  
<213> Homo sapiens

<400> 26

Met Pro Gly Asn Ala Thr Pro Val Thr Thr Thr Ala Pro Trp Ala Ser  
1 5 10 15

Leu Gly Leu Ser Ala Lys Thr Cys Asn Asn Val Ser Phe Glu Glu Ser  
20 25 30

Arg Ile Val Leu Val Val Val Tyr Ser Ala Val Cys Thr Leu Gly Val  
35 40 45

Pro Ala Asn Cys Leu Thr Ala Trp Leu Ala Leu Leu Gln Val Leu Gln  
50 55 60

Gly Asn Val Leu Ala Val Tyr Leu Leu Cys Leu Ala Leu Cys Glu Leu  
65 70 75 80

Leu Tyr Thr Gly Thr Leu Pro Leu Trp Val Ile Tyr Ile Arg Asn Gln  
85 90 95

His Arg Trp Thr Leu Gly Leu Leu Ala Ser Lys Val Thr Ala Tyr Ile  
100 105 110

Phe Phe Cys Asn Ile Tyr Val Ser Ile Leu Phe Leu Cys Cys Ile Ser  
115 120 125

Cys Asp Arg Phe Val Ala Val Val Tyr Ala Leu Glu Ser Arg Gly Arg  
130 135 140

Arg Arg Arg Arg Thr Ala Ile Leu Ile Ser Ala Cys Ile Phe Ile Leu  
145 150 155 160

Val Gly Ile Val His Tyr Pro Val Phe Gln Thr Glu Asp Lys Glu Thr  
165 170 175

Cys Phe Asp Met Leu Gln Met Asp Ser Arg Ile Ala Gly Tyr Tyr Tyr  
180 185 190

Aren7US29CON.txt

Ala Arg Phe Thr Val Gly Phe Ala Ile Pro Leu Ser Ile Ile Ala Phe  
195 200 205

Thr Asn His Arg Ile Phe Arg Ser Ile Lys Gln Ser Met Gly Leu Ser  
210 215 220

Ala Ala Gln Lys Ala Lys Val Lys His Ser Ala Ile Ala Val Val Val  
225 230 235 240

Ile Phe Leu Val Cys Phe Ala Pro Tyr His Leu Val Leu Leu Val Lys  
245 250 255

Ala Ala Ala Phe Ser Tyr Tyr Arg Gly Asp Arg Asn Ala Met Cys Gly  
260 265 270

Leu Glu Glu Arg Leu Tyr Thr Ala Ser Val Val Phe Leu Cys Leu Ser  
275 280 285

Thr Val Asn Gly Val Ala Asp Pro Ile Ile Tyr Val Leu Ala Thr Asp  
290 295 300

His Ser Arg Gln Glu Val Ser Arg Ile His Lys Gly Trp Lys Glu Trp  
305 310 315 320

Ser Met Lys Thr Asp Val Thr Arg Leu Thr His Ser Arg Asp Thr Glu  
325 330 335

Glu Leu Gln Ser Pro Val Ala Leu Ala Asp His Tyr Thr Phe Ser Arg  
340 345 350

Pro Val His Pro Pro Gly Ser Pro Cys Pro Ala Lys Arg Leu Ile Glu  
355 360 365

Glu Ser Cys  
370

<210> 27  
<211> 1113  
<212> DNA  
<213> Homo sapiens

<400> 27  
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atctccattt tgctagtgaag agataagacc ttgcatagag caccttacta cttcctgttg 180  
gatctttgct gttcagatat cctcagatct gcaatttggt tccatttgt gttcaactct 240  
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ggggttttgt cctgtttcca cactgctttc atgctcttct gcatcagtgt caccagatac 360  
ttagctatcg cccatcaccg cttctataca aagaggctga ccttttggac gtgtctggct 420

## Aren7US29CON.txt

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ggcacttact cattcattag ggaggaagat caatgcacct tccaacaccg ctcttcagg 540
gctaattgatt ccttaggatt tatgtctgctt ctgtctctca tcctcctagc cacacagctt 600
gtctacctca agctgatatt tttcgtccac gatcgaagaa aaatgaagcc agtccagttt 660
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caaaatgcaa acaccacagg cagaagaagg ctattggtct tagacgagtt caaaatggag 840
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aggttaccaa gggaacctta ctgtgttata tga 1113

```

<210> 28  
 <211> 370  
 <212> PRT  
 <213> Homo sapiens

<400> 28

Met Ala Asn Tyr Ser His Ala Ala Asp Asn Ile Leu Gln Asn Leu Ser  
1 5 10 15

Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Ile Gly  
20 25 30

Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp  
35 40 45

Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys  
50 55 60

Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser  
65 70 75 80

Val Lys Asn Gly Ser Thr Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val  
85 90 95

Ile Ala Phe Leu Gly Val Leu Ser Cys Phe His Thr Ala Phe Met Leu  
100 105 110

Phe Cys Ile Ser Val Thr Arg Tyr Leu Ala Ile Ala His His Arg Phe  
115 120 125

Tyr Thr Lys Arg Leu Thr Phe Trp Thr Cys Leu Ala Val Ile Cys Met  
130 135 140

Val Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Leu Asp Val  
145 150 155 160

Aren7US29CON.txt

Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His  
165 170 175

Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Leu Ala  
180 185 190

Leu Ile Leu Leu Ala Thr Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe  
195 200 205

Val His Asp Arg Arg Lys Met Lys Pro Val Gln Phe Val Ala Ala Val  
210 215 220

Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Ser Gly Gln Ala Ala  
225 230 235 240

Ala Asn Trp Leu Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu  
245 250 255

Leu Gly Ile Arg Gln Asn Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu  
260 265 270

Val Leu Asp Glu Phe Lys Met Glu Lys Arg Ile Ser Arg Met Phe Tyr  
275 280 285

Ile Met Thr Phe Leu Phe Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala  
290 295 300

Cys Tyr Trp Arg Val Phe Ala Arg Gly Pro Val Val Pro Gly Gly Phe  
305 310 315 320

Leu Thr Ala Ala Val Trp Met Ser Phe Ala Gln Ala Gly Ile Asn Pro  
325 330 335

Phe Val Cys Ile Phe Ser Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr  
340 345 350

Thr Leu Leu Tyr Cys Arg Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys  
355 360 365

Val Ile  
370

<210> 29  
<211> 1080  
<212> DNA  
<213> Homo sapiens

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aacctcttct ctctgtgggt gctgtgccgg cgcattggggc ccagatcccc gtcggtcatc 180

Aren7US29CON.txt

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<210> 30  
 <211> 359  
 <212> PRT  
 <213> Homo sapiens

<400> 30

Met Gln Val Pro Asn Ser Thr Gly Pro Asp Asn Ala Thr Leu Gln Met  
 1 5 10 15

Leu Arg Asn Pro Ala Ile Ala Val Ala Leu Pro Val Val Tyr Ser Leu  
 20 25 30

Val Ala Ala Val Ser Ile Pro Gly Asn Leu Phe Ser Leu Trp Val Leu  
 35 40 45

Cys Arg Arg Met Gly Pro Arg Ser Pro Ser Val Ile Phe Met Ile Asn  
 50 55 60

Leu Ser Val Thr Asp Leu Met Leu Ala Ser Val Leu Pro Phe Gln Ile  
 65 70 75 80

Tyr Tyr His Cys Asn Arg His His Trp Val Phe Gly Val Leu Leu Cys  
 85 90 95

Asn Val Val Thr Val Ala Phe Tyr Ala Asn Met Tyr Ser Ser Ile Leu  
 100 105 110

Thr Met Thr Cys Ile Ser Val Glu Arg Phe Leu Gly Val Leu Tyr Pro  
 115 120 125

Aren7US29CON.txt

Leu Ser Ser Lys Arg Trp Arg Arg Arg Arg Tyr Ala Val Ala Ala Cys  
130 135 140

Ala Gly Thr Trp Leu Leu Leu Thr Ala Leu Cys Pro Leu Ala Arg  
145 150 155 160

Thr Asp Leu Thr Tyr Pro Val His Ala Leu Gly Ile Ile Thr Cys Phe  
165 170 175

Asp Val Leu Lys Trp Thr Met Leu Pro Ser Val Ala Met Trp Ala Val  
180 185 190

Phe Leu Phe Thr Ile Phe Ile Leu Leu Phe Leu Ile Pro Phe Val Ile  
195 200 205

Thr Val Ala Cys Tyr Thr Ala Thr Ile Leu Lys Leu Leu Arg Thr Glu  
210 215 220

Glu Ala His Gly Arg Glu Gln Arg Arg Arg Ala Val Gly Leu Ala Ala  
225 230 235 240

Val Val Leu Leu Ala Phe Val Thr Cys Phe Ala Pro Asn Asn Phe Val  
245 250 255

Leu Leu Ala His Ile Val Ser Arg Leu Phe Tyr Gly Lys Ser Tyr Tyr  
260 265 270

His Val Tyr Lys Leu Thr Leu Cys Leu Ser Cys Leu Asn Asn Cys Leu  
275 280 285

Asp Pro Phe Val Tyr Tyr Phe Ala Ser Arg Glu Phe Gln Leu Arg Leu  
290 295 300

Arg Glu Tyr Leu Gly Cys Arg Arg Val Pro Arg Asp Thr Leu Asp Thr  
305 310 315 320

Arg Arg Glu Ser Leu Phe Ser Ala Arg Thr Thr Ser Val Arg Ser Glu  
325 330 335

Ala Gly Ala His Pro Glu Gly Met Glu Gly Ala Thr Arg Pro Gly Leu  
340 345 350

Gln Arg Gln Glu Ser Val Phe  
355

<210> 31  
<211> 1503  
<212> DNA  
<213> Homo sapiens

<400> 31  
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ccagtcgccg ccggggcgcg ctccggtgcc gcggcgagtg gcacaggctg gcagccatgg 120



Aren7US29CON.txt

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tcggttcaag gcagcgcgac tgcgggtggc gcacgaccag ggcgcagacc ttggggcgcg 300  
cggcccatgg agtcggggct gctgcggccg gcgccggtga gcgaggtcat cgtcctgcat 360  
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agcttcagcg gctcggagcg ctcatgccc cagcgcgacg ggctggacac cagcggctcc 1440  
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tga 1503

<210> 32  
<211> 500  
<212> PRT  
<213> Homo sapiens

<400> 32

Met Glu Arg Pro Trp Glu Asp Ser Pro Gly Pro Glu Gly Ala Ala Glu  
1 5 10 15

Gly Ser Pro Val Pro Val Ala Ala Gly Ala Arg Ser Gly Ala Ala Ala  
20 25 30

Ser Gly Thr Gly Trp Gln Pro Trp Ala Glu Cys Pro Gly Pro Lys Gly  
35 40 45

Arg Gly Gln Leu Leu Ala Thr Ala Gly Pro Leu Arg Arg Trp Pro Ala  
50 55 60

Aren7US29CON.txt

Pro Ser Pro Ala Ser Ser Ser Pro Ala Pro Gly Ala Ala Ser Ala His  
 65 70 75 80  
 Ser Val Gln Gly Ser Ala Thr Ala Gly Gly Ala Arg Pro Gly Arg Arg  
 85 90 95  
 Pro Trp Gly Ala Arg Pro Met Glu Ser Gly Leu Leu Arg Pro Ala Pro  
 100 105 110  
 Val Ser Glu Val Ile Val Leu His Tyr Asn Tyr Thr Gly Lys Leu Arg  
 115 120 125  
 Gly Ala Ser Tyr Gln Pro Gly Ala Gly Leu Arg Ala Asp Ala Val Val  
 130 135 140  
 Cys Leu Ala Val Cys Ala Phe Ile Val Leu Glu Asn Leu Ala Val Leu  
 145 150 155 160  
 Leu Val Leu Gly Arg His Pro Arg Phe His Ala Pro Met Phe Leu Leu  
 165 170 175  
 Leu Gly Ser Leu Thr Leu Ser Asp Leu Leu Ala Gly Ala Ala Tyr Ala  
 180 185 190  
 Ala Asn Ile Leu Leu Ser Gly Pro Leu Thr Leu Lys Leu Ser Pro Ala  
 195 200 205  
 Leu Trp Phe Ala Arg Glu Gly Gly Val Phe Val Ala Leu Thr Ala Ser  
 210 215 220  
 Val Leu Ser Leu Leu Ala Ile Ala Leu Glu Arg Ser Leu Thr Met Ala  
 225 230 235 240  
 Arg Arg Gly Pro Ala Pro Val Ser Ser Arg Gly Arg Thr Leu Ala Met  
 245 250 255  
 Ala Ala Ala Ala Trp Gly Val Ser Leu Leu Leu Gly Leu Leu Pro Ala  
 260 265 270  
 Leu Gly Trp Asn Cys Leu Gly Arg Leu Asp Ala Cys Ser Thr Val Leu  
 275 280 285  
 Pro Leu Tyr Ala Lys Ala Tyr Val Leu Phe Cys Val Leu Ala Phe Val  
 290 295 300  
 Gly Ile Leu Ala Ala Ile Cys Ala Leu Tyr Ala Arg Ile Tyr Cys Gln  
 305 310 315 320  
 Val Arg Ala Asn Ala Arg Arg Leu Pro Ala Arg Pro Gly Thr Ala Gly  
 325 330 335

Aren7US29CON.txt

Thr Thr Ser Thr Arg Ala Arg Arg Lys Pro Arg Ser Leu Ala Leu Leu  
340 345 350

Arg Thr Leu Ser Val Val Leu Leu Ala Phe Val Ala Cys Trp Gly Pro  
355 360 365

Leu Phe Leu Leu Leu Leu Leu Asp Val Ala Cys Pro Ala Arg Thr Cys  
370 375 380

Pro Val Leu Leu Gln Ala Asp Pro Phe Leu Gly Leu Ala Met Ala Asn  
385 390 395 400

Ser Leu Leu Asn Pro Ile Ile Tyr Thr Leu Thr Asn Arg Asp Leu Arg  
405 410 415

His Ala Leu Leu Arg Leu Val Cys Cys Gly Arg His Ser Cys Gly Arg  
420 425 430

Asp Pro Ser Gly Ser Gln Gln Ser Ala Ser Ala Ala Glu Ala Ser Gly  
435 440 445

Gly Leu Arg Arg Cys Leu Pro Pro Gly Leu Asp Gly Ser Phe Ser Gly  
450 455 460

Ser Glu Arg Ser Ser Pro Gln Arg Asp Gly Leu Asp Thr Ser Gly Ser  
465 470 475 480

Thr Gly Ser Pro Gly Ala Pro Thr Ala Ala Arg Thr Leu Val Ser Glu  
485 490 495

Pro Ala Ala Asp  
500

<210> 33  
<211> 1029  
<212> DNA  
<213> Homo sapiens

<400> 33  
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atcacaaatg gcctggcgat gaggattttc tttcaaatcc ggagtaaata aaactttatt 180  
atttttctta agaacacagt catttctgat cttctcatga ttctgacttt tccattcaaa 240  
attcttagtg atgccaaact gggaacagga ccactgagaa cttttgtgtg tcaagttacc 300  
tccgtcatat ttattttcac aatgtatatc agtatttcat tcctgggact gataactatc 360  
gatcgctacc agaagaccac caggccattt aaaacatcca accccaaaaa tctcttgggg 420  
gctaagattc tctctgttgt catctgggca ttcattgttct tactctcttt gcctaactatg 480  
attctgacca acaggcagcc gagagacaag aatgtgaaga aatgctcttt ccttaaatca 540  
gagttcggtc tagtctggca tgaaatagta aattacatct gtcaagtcatt tttctggatt 600

## Aren7US29CON.txt

```

aatttcttaa ttgttattgt atgttataca ctcattacaa aagaactgta ccggtcatac 660
gtaagaacga ggggtgtagg taaagtcccc aggaaaaagg tgaacgtcaa agttttcatt 720
atcattgctg tattctttat ttgttttgtt cttttccatt ttgcccgaat tccttacacc 780
ctgagccaaa cccgggatgt ctttgactgc actgctgaaa atactctgtt ctatgtgaaa 840
gagagcactc tgtgggtaac ttccttaaat gcatgcctgg atccgttcat ctattttttc 900
ctttgcaagt ctttcagaaa ttccttgata agtatgctga agtgccccaa ttctgcaaca 960
tctctgtccc aggacaatag gaaaaaagaa caggatggtg gtgacccaaa tgaagagact 1020
ccaatgtaa 1029

```

```

<210> 34
<211> 342
<212> PRT
<213> Homo sapiens

```

```

<400> 34

```

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Met Gln Ala Val Asp Asn Leu Thr Ser Ala Pro Gly Asn Thr Ser Leu
1 5 10 15

```

```

Cys Thr Arg Asp Tyr Lys Ile Thr Gln Val Leu Phe Pro Leu Leu Tyr
20 25 30

```

```

Thr Val Leu Phe Phe Val Gly Leu Ile Thr Asn Gly Leu Ala Met Arg
35 40 45

```

```

Ile Phe Phe Gln Ile Arg Ser Lys Ser Asn Phe Ile Ile Phe Leu Lys
50 55 60

```

```

Asn Thr Val Ile Ser Asp Leu Leu Met Ile Leu Thr Phe Pro Phe Lys
65 70 75 80

```

```

Ile Leu Ser Asp Ala Lys Leu Gly Thr Gly Pro Leu Arg Thr Phe Val
85 90 95

```

```

Cys Gln Val Thr Ser Val Ile Phe Tyr Phe Thr Met Tyr Ile Ser Ile
100 105 110

```

```

Ser Phe Leu Gly Leu Ile Thr Ile Asp Arg Tyr Gln Lys Thr Thr Arg
115 120 125

```

```

Pro Phe Lys Thr Ser Asn Pro Lys Asn Leu Leu Gly Ala Lys Ile Leu
130 135 140

```

```

Ser Val Val Ile Trp Ala Phe Met Phe Leu Leu Ser Leu Pro Asn Met
145 150 155 160

```

```

Ile Leu Thr Asn Arg Gln Pro Arg Asp Lys Asn Val Lys Lys Cys Ser
165 170 175

```

```

Phe Leu Lys Ser Glu Phe Gly Leu Val Trp His Glu Ile Val Asn Tyr
180 185 190

```

Aren7US29CON.txt

Ile Cys Gln Val Ile Phe Trp Ile Asn Phe Leu Ile Val Ile Val Cys  
195 200 205

Tyr Thr Leu Ile Thr Lys Glu Leu Tyr Arg Ser Tyr Val Arg Thr Arg  
210 215 220

Gly Val Gly Lys Val Pro Arg Lys Lys Val Asn Val Lys Val Phe Ile  
225 230 235 240

Ile Ile Ala Val Phe Phe Ile Cys Phe Val Pro Phe His Phe Ala Arg  
245 250 255

Ile Pro Tyr Thr Leu Ser Gln Thr Arg Asp Val Phe Asp Cys Thr Ala  
260 265 270

Glu Asn Thr Leu Phe Tyr Val Lys Glu Ser Thr Leu Trp Leu Thr Ser  
275 280 285

Leu Asn Ala Cys Leu Asp Pro Phe Ile Tyr Phe Phe Leu Cys Lys Ser  
290 295 300

Phe Arg Asn Ser Leu Ile Ser Met Leu Lys Cys Pro Asn Ser Ala Thr  
305 310 315 320

Ser Leu Ser Gln Asp Asn Arg Lys Lys Glu Gln Asp Gly Gly Asp Pro  
325 330 335

Asn Glu Glu Thr Pro Met  
340

<210> 35  
<211> 1077  
<212> DNA  
<213> Homo sapiens

<400> 35  
atgtcgggtct gctaccgtcc cccagggaaac gagacactgc tgagctggaa gacttcgcgg 60  
gccacaggca cagccttcct gctgctggcg gcgctgctgg ggctgcctgg caacggcttc 120  
gtggtgtgga gcttggcggg ctggcggcct gcacgggggc gaccgctggc ggccacgctt 180  
gtgctgcacc tggcgctggc cgacggcgcg gtgctgctgc tcacgccgct ctttgtggcc 240  
ttcctgaccc ggcaggcctg gccgctgggc caggcgggct gcaaggcggg gtactacgtg 300  
tgcgcgctca gcatgtacgc cagcgtgctg ctacccggcc tgctcagcct gcagcgctgc 360  
ctcgagtcac cccgcccctt cctggcgcct cggtgcgca gcccggccct ggcccgcgc 420  
ctgctgctgg cggctctggc ggccggcctg ttgctcgccg tcccgccgc cgtctaccgc 480  
cacctgtgga gggaccgcgt atgccagctg tgccaccgt cgccgggtcca cgccgccgc 540  
cacctgagcc tggagactct gaccgctttc gtgcttcctt tcgggctgat gctcggctgc 600  
tacagcgtga cgctggcacg gctgcggggc gcccgctggg gctccgggcg gcacggggcg 660

Aren7US29CON.txt

cggggtgggcc ggctggtgag cgccatcgtg cttgccttcg gcttgctctg ggccccctac 720  
cacgcagtca accttctgca ggcggtcgca gcgctggctc caccggaagg ggccttggcg 780  
aagctgggag gagccggcca ggcggcgca gcgggaacta cggccttggc cttcttcagt 840  
tctagcgtca acccggtgct ctacgtcttc accgctggag atctgctgcc ccgggcaggt 900  
ccccgtttcc tcacgcggct cttcgaaggc tctggggagg cccgaggggg cggccgctct 960  
aggggaaggga ccatggagct ccgaactacc cctcagctga aagtgggtggg gcagggccgc 1020  
ggcaatggag acccgggggg tgggatggag aaggacggtc cggaatggga cctttga 1077

<210> 36  
<211> 358  
<212> PRT  
<213> Homo sapiens

<400> 36

Met Ser Val Cys Tyr Arg Pro Pro Gly Asn Glu Thr Leu Leu Ser Trp  
1 5 10 15

Lys Thr Ser Arg Ala Thr Gly Thr Ala Phe Leu Leu Leu Ala Ala Leu  
20 25 30

Leu Gly Leu Pro Gly Asn Gly Phe Val Val Trp Ser Leu Ala Gly Trp  
35 40 45

Arg Pro Ala Arg Gly Arg Pro Leu Ala Ala Thr Leu Val Leu His Leu  
50 55 60

Ala Leu Ala Asp Gly Ala Val Leu Leu Leu Thr Pro Leu Phe Val Ala  
65 70 75 80

Phe Leu Thr Arg Gln Ala Trp Pro Leu Gly Gln Ala Gly Cys Lys Ala  
85 90 95

Val Tyr Tyr Val Cys Ala Leu Ser Met Tyr Ala Ser Val Leu Leu Thr  
100 105 110

Gly Leu Leu Ser Leu Gln Arg Cys Leu Ala Val Thr Arg Pro Phe Leu  
115 120 125

Ala Pro Arg Leu Arg Ser Pro Ala Leu Ala Arg Arg Leu Leu Leu Ala  
130 135 140

Val Trp Leu Ala Ala Leu Leu Leu Ala Val Pro Ala Ala Val Tyr Arg  
145 150 155 160

His Leu Trp Arg Asp Arg Val Cys Gln Leu Cys His Pro Ser Pro Val  
165 170 175

His Ala Ala Ala His Leu Ser Leu Glu Thr Leu Thr Ala Phe Val Leu  
180 185 190

Pro Phe Gly Leu Met Leu Gly Cys Tyr Ser Val Thr Leu Ala Arg Leu  
 195 200 205

Arg Gly Ala Arg Trp Gly Ser Gly Arg His Gly Ala Arg Val Gly Arg  
 210 215 220

Leu Val Ser Ala Ile Val Leu Ala Phe Gly Leu Leu Trp Ala Pro Tyr  
 225 230 235 240

His Ala Val Asn Leu Leu Gln Ala Val Ala Ala Leu Ala Pro Pro Glu  
 245 250 255

Gly Ala Leu Ala Lys Leu Gly Gly Ala Gly Gln Ala Ala Arg Ala Gly  
 260 265 270

Thr Thr Ala Leu Ala Phe Phe Ser Ser Ser Val Asn Pro Val Leu Tyr  
 275 280 285

Val Phe Thr Ala Gly Asp Leu Leu Pro Arg Ala Gly Pro Arg Phe Leu  
 290 295 300

Thr Arg Leu Phe Glu Gly Ser Gly Glu Ala Arg Gly Gly Gly Arg Ser  
 305 310 315 320

Arg Glu Gly Thr Met Glu Leu Arg Thr Thr Pro Gln Leu Lys Val Val  
 325 330 335

Gly Gln Gly Arg Gly Asn Gly Asp Pro Gly Gly Gly Met Glu Lys Asp  
 340 345 350

Gly Pro Glu Trp Asp Leu  
 355

<210> 37  
 <211> 1005  
 <212> DNA  
 <213> Homo sapiens

<400> 37  
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 ctggaaaagt actacctttc cattttttat gggattgagt tcgttggtggg agtccttgga 120  
 aataccattg ttgtttacgg ctacatcttc tctctgaaga actggaacag cagtaatatt 180  
 tatctcttta acctctctgt ctctgactta gcttttctgt gcaccctccc catgctgata 240  
 aggagttagt ccaatggaaa ctggatatat ggagacgtgc tctgcataag caaccgatat 300  
 gtgcttcatg ccaacctcta taccagcatt ctctttctca cttttatcag catagatcga 360  
 tacttgataa ttaagtatcc tttccgagaa caccttctgc aaaagaaaga gtttgctatt 420  
 ttaatctcct tggccatttg ggtttttagta accttagagt tactacccat acttcccctt 480  
 ataaatcctg ttataactga caatggcacc acctgtaatg attttgcaag ttctggagac 540  
 cccaactaca acctcattta cagcatgtgt ctaacactgt tggggttcct tattcctctt 600

## Aren7US29CON.txt

```

tttgtgatgt gtttctttta ttacaagatt gctctcttcc taaagcagag gaataggcag 660
gttgctactg ctctgcccct tgaaaagcct ctcaacttgg tcatcatggc agtggtaatc 720
ttctctgtgc tttttacacc ctatcacgtc atgcggaatg tgaggatcgc ttcacgcctg 780
gggagttgga agcagtatca gtgcactcag gtcgtcatca actcctttta cattgtgaca 840
cggccttttg cctttctgaa cagtgtcatc aaccctgtct tctattttct tttgggagat 900
cacttcaggg acatgctgat gaatcaactg agacacaact tcaaatccct tacatccttt 960
agcagatggg ctcatgaact cctactttca ttcagagaaa agtga 1005

```

```

<210> 38
<211> 334
<212> PRT
<213> Homo sapiens
<400> 38

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Met Leu Gly Ile Met Ala Trp Asn Ala Thr Cys Lys Asn Trp Leu Ala
1      5      10
Ala Glu Ala Ala Leu Glu Lys Tyr Tyr Leu Ser Ile Phe Tyr Gly Ile
20     25     30
Glu Phe Val Val Gly Val Leu Gly Asn Thr Ile Val Val Tyr Gly Tyr
35     40     45
Ile Phe Ser Leu Lys Asn Trp Asn Ser Ser Asn Ile Tyr Leu Phe Asn
50     55     60
Leu Ser Val Ser Asp Leu Ala Phe Leu Cys Thr Leu Pro Met Leu Ile
65     70     75     80
Arg Ser Tyr Ala Asn Gly Asn Trp Ile Tyr Gly Asp Val Leu Cys Ile
85     90     95
Ser Asn Arg Tyr Val Leu His Ala Asn Leu Tyr Thr Ser Ile Leu Phe
100    105    110
Leu Thr Phe Ile Ser Ile Asp Arg Tyr Leu Ile Ile Lys Tyr Pro Phe
115    120    125
Arg Glu His Leu Leu Gln Lys Lys Glu Phe Ala Ile Leu Ile Ser Leu
130    135    140
Ala Ile Trp Val Leu Val Thr Leu Glu Leu Leu Pro Ile Leu Pro Leu
145    150    155    160
Ile Asn Pro Val Ile Thr Asp Asn Gly Thr Thr Cys Asn Asp Phe Ala
165    170    175
Ser Ser Gly Asp Pro Asn Tyr Asn Leu Ile Tyr Ser Met Cys Leu Thr
180    185    190

```



## Aren7US29CON.txt

Leu Leu Gly Phe Leu Ile Pro Leu Phe Val Met Cys Phe Phe Tyr Tyr  
 195 200 205

Lys Ile Ala Leu Phe Leu Lys Gln Arg Asn Arg Gln Val Ala Thr Ala  
 210 215 220

Leu Pro Leu Glu Lys Pro Leu Asn Leu Val Ile Met Ala Val Val Ile  
 225 230 235 240

Phe Ser Val Leu Phe Thr Pro Tyr His Val Met Arg Asn Val Arg Ile  
 245 250 255

Ala Ser Arg Leu Gly Ser Trp Lys Gln Tyr Gln Cys Thr Gln Val Val  
 260 265 270

Ile Asn Ser Phe Tyr Ile Val Thr Arg Pro Leu Ala Phe Leu Asn Ser  
 275 280 285

Val Ile Asn Pro Val Phe Tyr Phe Leu Leu Gly Asp His Phe Arg Asp  
 290 295 300

Met Leu Met Asn Gln Leu Arg His Asn Phe Lys Ser Leu Thr Ser Phe  
 305 310 315 320

Ser Arg Trp Ala His Glu Leu Leu Leu Ser Phe Arg Glu Lys  
 325 330

<210> 39  
 <211> 1296  
 <212> DNA  
 <213> Homo sapiens

<400> 39  
 atgcaggcgc ttaacattac cccggagcag ttctctcggc tgctgcggga ccacaacctg 60  
 acgcgggagc agttcatcgc tctgtaccgg ctgcgaccgc tcgtctacac cccagagctg 120  
 ccgggacgcg ccaagctggc cctcgtgctc accggcgtgc tcatcttcgc cctggcgctc 180  
 ttgggcaatg ctctggtgtt ctacgtggtg acccgagca aggccatgcg caccgtcacc 240  
 aacatcttta tctgctcctt ggcgctcagt gacctgctca tcaccttctt ctgcattccc 300  
 gtcaccatgc tccagaacat ttccgacaac tggctggggg gtgctttcat ttgcaagatg 360  
 gtgccatttg tccagtctac cgctgttggt acagaaatgc tcactatgac ctgcattgct 420  
 gtggaaaggc accagggact tgtgcatcct tttaaaatga agtggcaata caccaaccga 480  
 agggctttca caatgctagg tgtggtctgg ctggtggcag tcatcgtagg atcacccatg 540  
 tggcacgtgc aacaacttga gatcaaatat gacttcctat atgaaaagga acacatctgc 600  
 tgcttagaag agtggaccag ccctgtgcac cagaagatct acaccacctt catccttgctc 660  
 atcctcttcc tcctgcctct tatggtgatg cttattctgt acagtaaaat tggttatgaa 720  
 ctttggataa agaaaagagt tggggatggt tcagtgttc gaactattca tggaaaagaa 780  
 atgtccaaaa tagccaggaa gaagaaacga gctgtcatta tgatggtgac agtgggtggct 840

## Aren7US29CON.txt

```

ctctttgctg tgtgctgggc accattccat gttgtccata tgatgattga atacagtaat 900
tttgaaaagg aatatgatga tgtcacaatc aagatgattt ttgctatcgt gcaaattatt 960
ggattttcca actccatctg taatcccatt gtctatgcat ttatgaatga aaacttcaaa 1020
aaaaatgttt tgtctgcagt ttgttattgc atagtaaata aaaccttctc tccagcacia 1080
aggcatggaa attcaggaat tacaatgatg cggaagaaag caaagttttc cctcagagag 1140
aatccagtgg aggaaaccaa aggagaagca ttcagtgatg gcaacattga agtcaaattg 1200
tgtgaacaga cagaggagaa gaaaaagctc aaacgacatc ttgctctctt taggtctgaa 1260
ctggctgaga attctccttt agacagtggg catta 1296

```

```

<210> 40
<211> 431
<212> PRT
<213> Homo sapiens

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<400> 40

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```

Met Gln Ala Leu Asn Ile Thr Pro Glu Gln Phe Ser Arg Leu Leu Arg
1      5      10     15
Asp His Asn Leu Thr Arg Glu Gln Phe Ile Ala Leu Tyr Arg Leu Arg
      20     25     30
Pro Leu Val Tyr Thr Pro Glu Leu Pro Gly Arg Ala Lys Leu Ala Leu
      35     40     45
Val Leu Thr Gly Val Leu Ile Phe Ala Leu Ala Leu Phe Gly Asn Ala
      50     55     60
Leu Val Phe Tyr Val Val Thr Arg Ser Lys Ala Met Arg Thr Val Thr
      65     70     75     80
Asn Ile Phe Ile Cys Ser Leu Ala Leu Ser Asp Leu Leu Ile Thr Phe
      85     90     95
Phe Cys Ile Pro Val Thr Met Leu Gln Asn Ile Ser Asp Asn Trp Leu
      100    105    110
Gly Gly Ala Phe Ile Cys Lys Met Val Pro Phe Val Gln Ser Thr Ala
      115    120    125
Val Val Thr Glu Met Leu Thr Met Thr Cys Ile Ala Val Glu Arg His
      130    135    140
Gln Gly Leu Val His Pro Phe Lys Met Lys Trp Gln Tyr Thr Asn Arg
      145    150    155    160
Arg Ala Phe Thr Met Leu Gly Val Val Trp Leu Val Ala Val Ile Val
      165    170    175
Gly Ser Pro Met Trp His Val Gln Gln Leu Glu Ile Lys Tyr Asp Phe
      180    185    190

```

Aren7US29CON.txt

Leu Tyr Glu Lys Glu His Ile Cys Cys Leu Glu Glu Trp Thr Ser Pro  
195 200 205

Val His Gln Lys Ile Tyr Thr Thr Phe Ile Leu Val Ile Leu Phe Leu  
210 215 220

Leu Pro Leu Met Val Met Leu Ile Leu Tyr Ser Lys Ile Gly Tyr Glu  
225 230 235 240

Leu Trp Ile Lys Lys Arg Val Gly Asp Gly Ser Val Leu Arg Thr Ile  
245 250 255

His Gly Lys Glu Met Ser Lys Ile Ala Arg Lys Lys Lys Arg Ala Val  
260 265 270

Ile Met Met Val Thr Val Val Ala Leu Phe Ala Val Cys Trp Ala Pro  
275 280 285

Phe His Val Val His Met Met Ile Glu Tyr Ser Asn Phe Glu Lys Glu  
290 295 300

Tyr Asp Asp Val Thr Ile Lys Met Ile Phe Ala Ile Val Gln Ile Ile  
305 310 315 320

Gly Phe Ser Asn Ser Ile Cys Asn Pro Ile Val Tyr Ala Phe Met Asn  
325 330 335

Glu Asn Phe Lys Lys Asn Val Leu Ser Ala Val Cys Tyr Cys Ile Val  
340 345 350

Asn Lys Thr Phe Ser Pro Ala Gln Arg His Gly Asn Ser Gly Ile Thr  
355 360 365

Met Met Arg Lys Lys Ala Lys Phe Ser Leu Arg Glu Asn Pro Val Glu  
370 375 380

Glu Thr Lys Gly Glu Ala Phe Ser Asp Gly Asn Ile Glu Val Lys Leu  
385 390 395 400

Cys Glu Gln Thr Glu Glu Lys Lys Lys Leu Lys Arg His Leu Ala Leu  
405 410 415

Phe Arg Ser Glu Leu Ala Glu Asn Ser Pro Leu Asp Ser Gly His  
420 425 430

<210> 41  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Novel Sequence

<400> 41  
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 <210> 42  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Novel Sequence  
  
 <400> 42  
 gagtgccagg cagagcaggt agac 24  
  
 <210> 43  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Novel Sequence  
  
 <400> 43  
 cccgaattcc tgcttgctcc cagcttggcc c 31  
  
 <210> 44  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Novel Sequence  
  
 <400> 44  
 tgtggatcct gctgtcaaag gtccattcc gg 32  
  
 <210> 45  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Novel Sequence  
  
 <400> 45  
 tcacaatgct aggtgtggtc 20  
  
 <210> 46  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Novel Sequence  
  
 <400> 46  
 tgcatagaca atgggattac ag 22  
  
 <210> 47  
 <211> 511  
 <212> DNA  
 <213> Homo sapiens  
 <400> 47

Aren7US29CON.txt

tcacaatgct aggtgtggtc tggctggtgg cagtcacgt aggatcacc	atgtggcacg	60
tgcaacaact tgagatcaaa tatgacttcc tatatgaaa ggaacacatc	tgctgcttag	120
aagagtggac cagccctgtg caccagaaga tctacaccac cttcatcctt	gtcatcctct	180
tcctcctgcc tcttatggtg atgcttattc tgtacgtaa attggttatg	aactttggat	240
aaagaaaaga gttggggatg gttcagtgc tgaactatt catggaaaag	aaatgtccaa	300
aatagccagg aagaagaaac gagctgtcat tatgatggtg acagtgggtg	ctctctttgc	360
tgtgtgctgg gcaccattcc atgttgcca tatgatgatt gaatacagta	attttgaaaa	420
ggaatatgat gatgtcaca tcaagatgat ttttgctatc gtgcaaatta	ttggattttc	480
caactccatc tgtaatcca ttgtctatgc a		511

<210> 48  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 48	
ctgcttagaa gagtggacca g	21

<210> 49  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 49	
ctgtgcacca gaagatctac ac	22

<210> 50  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 50	
caaggatgaa ggtggtgtag a	21

<210> 51  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 51	
gtgtagatct tctggtgcac agg	23

<210> 52  
 <211> 21  
 <212> DNA

<213> Artificial Sequence  
 <220>  
 <223> Novel Sequence  
 <400> 52  
 gcaatgcagg tcatagttag c 21

<210> 53  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Novel Sequence  
 <400> 53  
 tggagcatgg tgacgggaat gcagaag 27

<210> 54  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Novel Sequence  
 <400> 54  
 gtgatgagca ggctactgag cgccaag 27

<210> 55  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence  
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 <223> Novel Sequence  
 <400> 55  
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<210> 56  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Novel Sequence  
 <400> 56  
 ttgggttaca atctgaaggg ca 22

<210> 57  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Novel Sequence  
 <400> 57  
 actccgtgtc cagcaggact ctg 23

<210> 58

<211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 58  
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<210> 59  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 59  
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<210> 60  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 60  
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<210> 61  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 61  
 tgatgtgatg ccagatacta atagcac 27

<210> 62  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 62  
 cctgattcat ttaggtgaga ttgagac 27

<210> 63  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 63  
 cccaagcttc cccaggtgta tttgat 26

<210> 64  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 64  
 gttggatcca cataatgcat tttctc 26

<210> 65  
 <211> 1080  
 <212> DNA  
 <213> Homo sapiens

<400> 65  
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 gctggaaggc ataattacat atttgtcatg attcctactt tatacagtat catctttgtg 120  
 gtgggaatat ttggaaacag cttggtggtg atagtcattt acttttatat gaagctgaag 180  
 actgtggcca gtgtttttct tttgaattta gcactggctg acttatgctt tttactgact 240  
 ttgccactat gggctgtcta cacagctatg gaataccgct ggccctttgg caattaccta 300  
 tgtaagattg cttcagccag cgtcagtttc aacctgtacg ctagtgtgtt tctactcacg 360  
 tgtctcagca ttgatcgata cctggctatt gttcaccaa tgaagtcccg ccttcgacgc 420  
 acaatgcttg tagccaaagt cacctgcac atcatttggc tgctggcagg cttggccagt 480  
 ttgccagcta taatccatcg aaatgtattt ttcattgaga acaccaatat tacagtttgt 540  
 gctttccatt atgagtccca aaattcaacc cttccgatag ggctgggcct gaccaaaaat 600  
 atactgggtt tcctgtttcc ttttctgac attcttaca gttatactct tatttgaag 660  
 gccctaaaga aggcttatga aattcagaag aacaaaccaa gaaatgatga tatttttaag 720  
 ataattatgg caattgtgct tttctttttc ttttctgga tttccaccca aatattcact 780  
 tttctggatg tattgattca actaggcatc atacgtgact gtagaattgc agatattgtg 840  
 gacacggcca tgcctatcac catttgtata gcttatttta acaattgcct gaatcctctt 900  
 ttttatggct ttctggggaa aaaattttaa agatattttc tccagcttct aaaatatatt 960  
 cccccaaaag ccaaatccca ctcaaacctt tcaacaaaa tgagcacgct ttcctaccgc 1020  
 ccctcagata atgtaagctc atccaccaag aagcctgcac catgttttga ggttgagtga 1080

<210> 66  
 <211> 359  
 <212> PRT  
 <213> Homo sapiens

<400> 66

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Asp Cys Pro Lys Ala Gly Arg His Asn Tyr Ile Phe Val Met Ile Pro  
 20 25 30



## Aren7US29CON.txt

Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu  
 35 40 45  
 Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser  
 50 55 60  
 Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr  
 65 70 75 80  
 Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe  
 85 90 95  
 Gly Asn Tyr Leu Cys Lys Ile Ala Ser Ala Ser Val Ser Phe Asn Leu  
 100 105 110  
 Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu  
 115 120 125  
 Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val  
 130 135 140  
 Ala Lys Val Thr Cys Ile Ile Ile Trp Leu Leu Ala Gly Leu Ala Ser  
 145 150 155 160  
 Leu Pro Ala Ile Ile His Arg Asn Val Phe Phe Ile Glu Asn Thr Asn  
 165 170 175  
 Ile Thr Val Cys Ala Phe His Tyr Glu Ser Gln Asn Ser Thr Leu Pro  
 180 185 190  
 Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe  
 195 200 205  
 Leu Ile Ile Leu Thr Ser Tyr Thr Leu Ile Trp Lys Ala Leu Lys Lys  
 210 215 220  
 Ala Tyr Glu Ile Gln Lys Asn Lys Pro Arg Asn Asp Asp Ile Phe Lys  
 225 230 235 240  
 Ile Ile Met Ala Ile Val Leu Phe Phe Phe Phe Ser Trp Ile Pro His  
 245 250 255  
 Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Ile Ile Arg  
 260 265 270  
 Asp Cys Arg Ile Ala Asp Ile Val Asp Thr Ala Met Pro Ile Thr Ile  
 275 280 285  
 Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe  
 290 295 300  
 Leu Gly Lys Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr Ile  
 Page 49

Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser Thr  
325 330 335

Leu Ser Tyr Arg Pro Ser Asp Asn Val Ser Ser Ser Thr Lys Lys Pro  
340 345 350

Ala Pro Cys Phe Glu Val Glu  
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<400> 71  
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<210> 72  
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<400> 72  
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<210> 73  
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tacgagcaac tttttgtctc tcctgaggtg tttgtgactc tgggtgtcat cagcttggtg 180  
gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc acccatgtac 240  
tttttcatct gcagcttggc tgtggctgat atgctggtga gcgtttcaaa tggatcagaa 300  
accattatca tcaccctatt aaacagtaca gatacggatg cacagagttt cacagtgaat 360  
attgataatg tcattgactc ggtgatctgt agctccttgc ttgcatccat ttgcagcctg 420  
ctttcaattg cagtggacag gtactttact atcttctatg ctctccagta ccataacatt 480  
atgacagtta agcgggttgg gatcagcata agttgtatct gggcagcttg cacggtttca 540  
ggcattttgt tcatcattta ctacagatag agtgctgtca tcatctgcct catcaccatg 600  
ttcttcacca tgctggctct catggcttct ctctatgtcc acatgttcct gatggccagg 660  
cttcacatta agaggattgc tgcctcccc ggcactggtg ccatccgcca aggtgccaat 720  
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cccctgggag gcctttgtga cttgtctagc agatattaa 999

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<211> 332  
<212> PRT  
<213> Homo sapiens

<400> 74

Met Val Asn Ser Thr His Arg Gly Met His Thr Ser Leu His Leu Trp  
1 5 10 15

Asn Arg Ser Ser Tyr Arg Leu His Ser Asn Ala Ser Glu Ser Leu Gly  
Page 51

20

25

Lys Gly Tyr Ser Asp Gly Gly Cys Tyr Glu Gln Leu Phe Val Ser Pro  
35 40 45

Glu Val Phe Val Thr Leu Gly Val Ile Ser Leu Leu Glu Asn Ile Leu  
50 55 60

Val Ile Val Ala Ile Ala Lys Asn Lys Asn Leu His Ser Pro Met Tyr  
65 70 75 80

Phe Phe Ile Cys Ser Leu Ala Val Ala Asp Met Leu Val Ser Val Ser  
85 90 95

Asn Gly Ser Glu Thr Ile Ile Ile Thr Leu Leu Asn Ser Thr Asp Thr  
100 105 110

Asp Ala Gln Ser Phe Thr Val Asn Ile Asp Asn Val Ile Asp Ser Val  
115 120 125

Ile Cys Ser Ser Leu Leu Ala Ser Ile Cys Ser Leu Leu Ser Ile Ala  
130 135 140

Val Asp Arg Tyr Phe Thr Ile Phe Tyr Ala Leu Gln Tyr His Asn Ile  
145 150 155 160

Met Thr Val Lys Arg Val Gly Ile Ser Ile Ser Cys Ile Trp Ala Ala  
165 170 175

Cys Thr Val Ser Gly Ile Leu Phe Ile Ile Tyr Ser Asp Ser Ser Ala  
180 185 190

Val Ile Ile Cys Leu Ile Thr Met Phe Phe Thr Met Leu Ala Leu Met  
195 200 205

Ala Ser Leu Tyr Val His Met Phe Leu Met Ala Arg Leu His Ile Lys  
210 215 220

Arg Ile Ala Val Leu Pro Gly Thr Gly Ala Ile Arg Gln Gly Ala Asn  
225 230 235 240

Met Lys Gly Ala Ile Thr Leu Thr Ile Leu Ile Gly Val Phe Val Val  
245 250 255

Cys Trp Ala Pro Phe Phe Leu His Leu Ile Phe Tyr Ile Ser Cys Pro  
260 265 270

Gln Asn Pro Tyr Cys Val Cys Phe Met Ser His Phe Asn Leu Tyr Leu  
275 280 285

Ile Leu Ile Met Cys Asn Ser Ile Ile Asp Pro Leu Ile Tyr Ala Leu  
290 295 300

Aren7US29CON.txt

Arg Ser Gln Glu Leu Arg Lys Thr Phe Lys Glu Ile Ile Cys Cys Tyr  
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Pro Leu Gly Gly Leu Cys Asp Leu Ser Ser Arg Tyr  
325 330

<210> 75  
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<211> 31  
<212> DNA  
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<400> 76  
gtggaattca tttgccctgc ctcaaccccc a 31

<210> 77  
<211> 1344  
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<213> Homo sapiens

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ccccctcgca ttcgcggagc cgggacacga gaattggagc tggccattag aatcactctt 180  
tacgcagtga tcttctgat gagcgttggg ggaatatgc tcatcatcgt ggtcctggga 240  
ctgagccgcc gcctgaggac tgtcaccaat gccttcctcc tctcactggc agtcagcgac 300  
ctcctgctgg ctgtggcttg catgcccttc accctcctgc ccaatctcat gggcacattc 360  
atctttggca ccgtcatctg caaggcggtt tcctacctca tgggggtgtc tgtgagtgtg 420  
tccacgctaa gcctcgtggc catcgcaact gagcgatata gcgccatctg ccgaccactg 480  
caggcacgag tgtggcagac gcgctccac gcggctcgcg tgattgtagc cacgtggctg 540  
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cgtgtgctgc agtgcgtgca tcgctggccc agtgcgcggg tccgccagac ctggtccgta 660  
ctgctgcttc tgctcttggt cttcatccca ggtgtggtta tggccgtggc ctacgggctt 720  
atctctcgcg agctctactt agggcttcgc tttgacggcg acagtgacag cgacagccaa 780  
agcagggtcc gaaaccaagg cgggctgccg ggggctgttc accagaacgg gcgttgccgg 840  
cctgagactg gcgcggttgg caaagacagc gatggctgct acgtgcaact tccacgttcc 900  
cggcctgccc tggagctgac ggcgctgacg gctcctgggc cgggatccgg ctcccggccc 960

Aren7US29CON.txt

acccaggcca agctgctggc taagaagcgc gtggtgcgaa tggtgctggt gatcgttggt 1020  
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 ccgggtgcac accgagcact ctcgggtgct cctatctcct tcattcactt gctgagctac 1140  
 gcctcggcct gtgtcaaccc cctggtctac tgcttcatgc accgtcgctt tcgccaggcc 1200  
 tgcctggaaa cttgcgctcg ctgctgcccc cggcctccac gagctcgccc cagggtcttt 1260  
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 <212> PRT  
 <213> Homo sapiens

<400> 78

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 Ser Val Gly Asn Leu Ser Cys Glu Pro Pro Arg Ile Arg Gly Ala Gly  
 35 40 45  
 Thr Arg Glu Leu Glu Leu Ala Ile Arg Ile Thr Leu Tyr Ala Val Ile  
 50 55 60  
 Phe Leu Met Ser Val Gly Gly Asn Met Leu Ile Ile Val Val Leu Gly  
 65 70 75 80  
 Leu Ser Arg Arg Leu Arg Thr Val Thr Asn Ala Phe Leu Leu Ser Leu  
 85 90 95  
 Ala Val Ser Asp Leu Leu Leu Ala Val Ala Cys Met Pro Phe Thr Leu  
 100 105 110  
 Leu Pro Asn Leu Met Gly Thr Phe Ile Phe Gly Thr Val Ile Cys Lys  
 115 120 125  
 Ala Val Ser Tyr Leu Met Gly Val Ser Val Ser Val Ser Thr Leu Ser  
 130 135 140  
 Leu Val Ala Ile Ala Leu Glu Arg Tyr Ser Ala Ile Cys Arg Pro Leu  
 145 150 155 160  
 Gln Ala Arg Val Trp Gln Thr Arg Ser His Ala Ala Arg Val Ile Val  
 165 170 175  
 Ala Thr Trp Leu Leu Ser Gly Leu Leu Met Val Pro Tyr Pro Val Tyr  
 180 185 190

Aren7US29CON.txt

Thr Val Val Gln Pro Val Gly Pro Arg Val Leu Gln Cys Val His Arg  
195 200 205

Trp Pro Ser Ala Arg Val Arg Gln Thr Trp Ser Val Leu Leu Leu Leu  
210 215 220

Leu Leu Phe Phe Ile Pro Gly Val Val Met Ala Val Ala Tyr Gly Leu  
225 230 235 240

Ile Ser Arg Glu Leu Tyr Leu Gly Leu Arg Phe Asp Gly Asp Ser Asp  
245 250 255

Ser Asp Ser Gln Ser Arg Val Arg Asn Gln Gly Gly Leu Pro Gly Ala  
260 265 270

Val His Gln Asn Gly Arg Cys Arg Pro Glu Thr Gly Ala Val Gly Lys  
275 280 285

Asp Ser Asp Gly Cys Tyr Val Gln Leu Pro Arg Ser Arg Pro Ala Leu  
290 295 300

Glu Leu Thr Ala Leu Thr Ala Pro Gly Pro Gly Ser Gly Ser Arg Pro  
305 310 315 320

Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val Val Arg Met Leu Leu  
325 330 335

Val Ile Val Val Leu Phe Phe Leu Cys Trp Leu Pro Val Tyr Ser Ala  
340 345 350

Asn Thr Trp Arg Ala Phe Asp Gly Pro Gly Ala His Arg Ala Leu Ser  
355 360 365

Val Ala Pro Ile Ser Phe Ile His Leu Leu Ser Tyr Ala Ser Ala Cys  
370 375 380

Val Asn Pro Leu Val Tyr Cys Phe Met His Arg Arg Phe Arg Gln Ala  
385 390 395 400

Cys Leu Glu Thr Cys Ala Arg Cys Cys Pro Arg Pro Pro Arg Ala Arg  
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Pro Arg Ala Leu Pro Asp Glu Asp Pro Pro Thr Pro Ser Ile Ala Ser  
420 425 430

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<220>
<223> Novel Sequence

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<211> 30
<212> DNA
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<220>
<223> Novel Sequence

<400> 80
taaggatccc ttcccttcaa aacatccttg 30

<210> 81
<211> 1014
<212> DNA
<213> Homo sapiens

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aagttttttt tcctaaggac aagaagaatt gcactcatgg tcagcctgtc catctggata 420
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gatgccgaaa agtctaattt tactttatgc tatgacaaat accctttaga gaaatggcaa 540
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atctgtaacc ggaaagtcta ccaagctgtg cggcacataa aagccacgga aaacaaggaa 660
aagaagagaa tcataaaaact acttgtcagc atcacagtta cttttgtctt atgctttact 720
ccctttcatg tgatgttgct gattcgctgc attttagagc atgctgtgaa cttcgaagac 780
cacagcaatt ctgggaagcg aacttacaca atgtatagaa tcacggttgc attaacaagt 840
ttaaattgtg ttgctgatcc aattctgtac tgttttgtta ccgaaacagg aagatatgat 900
atgtggaata tattaataatt ctgcactggg aggtgtaata catcacaag acaaagaaaa 960
cgcatacttt ctgtgtctac aaaagatact atggaattag aggtccttga gtag 1014

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<211> 337
<212> PRT
<213> Homo sapiens

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1 5 10 15

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Aren7US29CON.txt

Phe Pro Ile Val Tyr Ile Phe Val Ile Ile Val Ser Ile Pro Ala Asn  
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 Ile Gly Ser Leu Cys Val Ser Phe Leu Gln Pro Lys Lys Glu Ser Glu  
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 Leu Gly Ile Tyr Leu Phe Ser Leu Ser Leu Ser Asp Leu Leu Tyr Ala  
 50 55 60  
 Leu Thr Leu Pro Leu Trp Ile Asp Tyr Thr Trp Asn Lys Asp Asn Trp  
 65 70 75 80  
 Thr Phe Ser Pro Ala Leu Cys Lys Gly Ser Ala Phe Leu Met Tyr Met  
 85 90 95  
 Lys Phe Tyr Ser Ser Thr Ala Phe Leu Thr Cys Ile Ala Val Asp Arg  
 100 105 110  
 Tyr Leu Ala Val Val Tyr Pro Leu Lys Phe Phe Phe Leu Arg Thr Arg  
 115 120 125  
 Arg Ile Ala Leu Met Val Ser Leu Ser Ile Trp Ile Leu Glu Thr Ile  
 130 135 140  
 Phe Asn Ala Val Met Leu Trp Glu Asp Glu Thr Val Val Glu Tyr Cys  
 145 150 155 160  
 Asp Ala Glu Lys Ser Asn Phe Thr Leu Cys Tyr Asp Lys Tyr Pro Leu  
 165 170 175  
 Glu Lys Trp Gln Ile Asn Leu Asn Leu Phe Arg Thr Cys Thr Gly Tyr  
 180 185 190  
 Ala Ile Pro Leu Val Thr Ile Leu Ile Cys Asn Arg Lys Val Tyr Gln  
 195 200 205  
 Ala Val Arg His Asn Lys Ala Thr Glu Asn Lys Glu Lys Lys Arg Ile  
 210 215 220  
 Ile Lys Leu Leu Val Ser Ile Thr Val Thr Phe Val Leu Cys Phe Thr  
 225 230 235 240  
 Pro Phe His Val Met Leu Leu Ile Arg Cys Ile Leu Glu His Ala Val  
 245 250 255  
 Asn Phe Glu Asp His Ser Asn Ser Gly Lys Arg Thr Tyr Thr Met Tyr  
 260 265 270  
 Arg Ile Thr Val Ala Leu Thr Ser Leu Asn Cys Val Ala Asp Pro Ile  
 275 280 285  
 Leu Tyr Cys Phe Val Thr Glu Thr Gly Arg Tyr Asp Met Trp Asn Ile  
 Page 57

290

295

Leu Lys Phe Cys Thr Gly Arg Cys Asn Thr Ser Gln Arg Gln Arg Lys  
305 310 315 320

Arg Ile Leu Ser Val Ser Thr Lys Asp Thr Met Glu Leu Glu Val Leu  
325 330 335

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gtgggaatat ttggaaacag cttgggtggtg atagtcattt acttttatat gaagctgaag 180  
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ccccaaaaag ccaaatccca ctcaaaccct tcaacaaaaa tgagcācgct ttcctaccgc 1020  
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<210> 90  
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<212> PRT  
<213> Homo sapiens

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Met Ile Leu Asn Ser Ser Thr Glu Asp Gly Ile Lys Arg Ile Gln Asp  
1 5 10 15

Aren7US29CON.txt

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 Thr Leu Tyr<sub>35</sub> Ser Ile Ile Phe Val<sub>40</sub> Val Gly Ile Phe Gly<sub>45</sub> Asn Ser Leu  
 Val Val<sub>50</sub> Ile Val Ile Tyr Phe<sub>55</sub> Tyr Met Lys Leu Lys<sub>60</sub> Thr Val Ala Ser  
 Val Phe Leu Leu Asn<sub>70</sub> Leu Ala Leu Ala Asp<sub>75</sub> Leu Cys Phe Leu Leu Thr<sub>80</sub>  
 Leu Pro Leu Trp Ala<sub>85</sub> Val Tyr Thr Ala Met<sub>90</sub> Glu Tyr Arg Trp Pro<sub>95</sub> Phe  
 Gly Asn Tyr Leu<sub>100</sub> Cys Lys Ile Ala Ser<sub>105</sub> Ala Ser Val Ser Phe<sub>110</sub> Asn Leu  
 Tyr Ala Ser<sub>115</sub> Val Phe Leu Leu Thr<sub>120</sub> Cys Leu Ser Ile Asp<sub>125</sub> Arg Tyr Leu  
 Ala Ile<sub>130</sub> Val His Pro Met Lys<sub>135</sub> Ser Arg Leu Arg Arg<sub>140</sub> Thr Met Leu Val  
 Ala Lys Val Thr Cys Ile<sub>150</sub> Ile Ile Trp Leu Leu<sub>155</sub> Ala Gly Leu Ala Ser<sub>160</sub>  
 Leu Pro Ala Ile Ile<sub>165</sub> His Arg Asn Val Phe Phe Ile Glu Asn Thr<sub>175</sub> Asn  
 Ile Thr Val Cys<sub>180</sub> Ala Phe His Tyr Glu<sub>185</sub> Ser Gln Asn Ser Thr<sub>190</sub> Leu Pro  
 Ile Gly Leu<sub>195</sub> Gly Leu Thr Lys Asn<sub>200</sub> Ile Leu Gly Phe Leu<sub>205</sub> Phe Pro Phe  
 Leu Ile<sub>210</sub> Ile Leu Thr Ser Tyr<sub>215</sub> Thr Leu Ile Trp Lys<sub>220</sub> Ala Leu Lys Lys  
 Ala Tyr Glu Ile Gln Lys<sub>230</sub> Asn Lys Pro Arg Asn<sub>235</sub> Asp Asp Ile Lys Lys<sub>240</sub>  
 Ile Ile Met Ala Ile<sub>245</sub> Val Leu Phe Phe Phe<sub>250</sub> Phe Ser Trp Ile Pro His  
 Gln Ile Phe Thr<sub>260</sub> Phe Leu Asp Val Leu<sub>265</sub> Ile Gln Leu Gly Ile<sub>270</sub> Ile Arg  
 Asp Cys Arg<sub>275</sub> Ile Ala Asp Ile Val<sub>280</sub> Asp Thr Ala Met Pro<sub>285</sub> Ile Thr Ile  
 Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe  
 Page 60

290

295

Leu Gly Lys Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr Ile  
305 310 315 320

Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser Thr  
325 330 335

Leu Ser Tyr Arg Pro Ser Asp Asn Val Ser Ser Ser Thr Lys Lys Pro  
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Ala Pro Cys Phe Glu Val Glu  
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gtgggaatat ttggaaacag cttggtggtg atagtcattt acttttatat gaagctgaag 180  
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gctttccatt atgagtccca aaattcaacc cttccgatag ggctgggcct gacaaaaat 600  
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Aren7US29CON.txt

gccctaaaga aggcttatga aattcagaag aacaaaccaa gaaatgatga tatttttaag 720  
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 tttctggatg tattgattca actaggcatc atacgtgact gtagaattgc agatattgtg 840  
 gacacggcca tgcctatcac catttgtata gcttatttta acaattgcct gaatcctctt 900  
 ttttatggct ttctggggaa aaaatttaaa agatattttc tccagcttct aaaatatatt 960  
 cccccaaaag ccaaattcca ctcaaacctt tcaacaaaaa tgagcacgct ttcctaccgc 1020  
 ccctcagata atgtaagctc atccaccaag aagcctgcac catgttttga ggttgagtga 1080

<210> 94  
 <211> 359  
 <212> PRT  
 <213> Homo sapiens

<400> 94

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 Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu  
 35 40 45  
 Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser  
 50 55 60  
 Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr  
 65 70 75 80  
 Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe  
 85 90 95  
 Gly Asn Tyr Leu Cys Lys Ile Ala Ser Ala Ser Val Ser Phe Ala Leu  
 100 105 110  
 Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu  
 115 120 125  
 Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val  
 130 135 140  
 Ala Lys Val Thr Cys Ile Ile Ile Trp Leu Leu Ala Gly Leu Ala Ser  
 145 150 155 160  
 Leu Pro Ala Ile Ile His Arg Asn Val Phe Phe Ile Glu Asn Thr Asn  
 165 170 175  
 Ile Thr Val Cys Ala Phe His Tyr Glu Ser Gln Asn Ser Thr Leu Pro  
 180 185 190

Aren7US29CON.txt

Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe  
195 200 205

Leu Ile Ile Leu Thr Ser Tyr Thr Leu Ile Trp Lys Ala Leu Lys Lys  
210 215 220

Ala Tyr Glu Ile Gln Lys Asn Lys Pro Arg Asn Asp Asp Ile Phe Lys  
225 230 235 240

Ile Ile Met Ala Ile Val Leu Phe Phe Phe Phe Ser Trp Ile Pro His  
245 250 255

Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Ile Ile Arg  
260 265 270

Asp Cys Arg Ile Ala Asp Ile Val Asp Thr Ala Met Pro Ile Thr Ile  
275 280 285

Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe  
290 295 300

Leu Gly Lys Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr Ile  
305 310 315 320

Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser Thr  
325 330 335

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340 345 350

Ala Pro Cys Phe Glu Val Glu  
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26

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29

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<210> 98  
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<400> 98  
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<210> 99  
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 <212> DNA  
 <213> Homo sapiens

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 gtgggaatat ttggaaacag cttggtggtg atagtcattt acttttatat gaagctgaag 180  
 actgtggcca gtgtttttct tttgaattta gcactggctg acttatgctt ttactgact 240  
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 tgtaagattg cttcagccag cgtcagtttc aacctgtacg ctagtgtgtt tctactcacg 360  
 tgtctcagca ttgatcgata cctggctatt gtaccaccaa tgaagtcccg cttcgacgc 420  
 acaatgcttg tagccaaagt cacctgcac atcatttggc tgctggcagg cttggccagt 480  
 ttgccagcta taatccatcg aaatgtatit ttcattgaga acaccaatat tacagtttgt 540  
 gctttccatt atgagtccca aaattcaacc cttccgatag ggctgggcct gacaaaaat 600  
 atactgggtt tcctgtttcc ttttctgac attccttaca gttatttttg aattcgaaaa 660  
 cacttactga agacgaatag ctatgggaag aacaggataa cccgtgacca agttaagaag 720  
 ataattatgg caattgtgct tttctttttc ttttcttggg ttccccacca aatattcact 780  
 tttctggatg tattgattca actaggcatc atacgtgact gtagaattgc agatattgtg 840  
 gacacggcca tgcctatcac catttgtata gcttatttta acaattgcct gaatcctctt 900  
 ttttatggct ttctggggaa aaaatttaaa agatattttc tccagcttct aaaatatatt 960  
 cccccaaaag ccaaatccca ctcaaactt tcaacaaaaa tgagcacgct ttctaccgc 1020  
 ccctcagata atgtaagctc atccaccaag aagcctgcac catgttttga gggtgagtga 1080

<210> 100  
 <211> 359  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 100

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Asp Cys Pro Lys Ala Gly Arg His Asn Tyr Ile Phe Val Met Ile Pro
20      25      30

Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu
35      40      45

Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser
50      55      60

Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr
65      70      75      80

Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe
85      90      95

Gly Asn Tyr Leu Cys Lys Ile Ala Ser Ala Ser Val Ser Phe Asn Leu
100     105     110

Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu
115     120     125

Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val
130     135     140

Ala Lys Val Thr Cys Ile Ile Ile Trp Leu Leu Ala Gly Leu Ala Ser
145     150     155     160

Leu Pro Ala Ile Ile His Arg Asn Val Phe Phe Ile Glu Asn Thr Asn
165     170     175

Ile Thr Val Cys Ala Phe His Tyr Glu Ser Gln Asn Ser Thr Leu Pro
180     185     190

Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe
195     200     205

Leu Ile Ile Leu Thr Ser Tyr Phe Gly Ile Arg Lys His Leu Leu Lys
210     215     220

Thr Asn Ser Tyr Gly Lys Asn Arg Ile Thr Arg Asp Gln Val Lys Lys
225     230     235     240

Ile Ile Met Ala Ile Val Leu Phe Phe Phe Phe Ser Trp Ile Pro His
245     250     255

Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Ile Ile Arg
260     265     270

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Aren7US29CON.txt

Asp Cys Arg Ile Ala Asp Ile Val Asp Thr Ala Met Pro Ile Thr Ile  
275 280 285

Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly Phe  
290 295 300

Leu Gly Lys Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr Ile  
305 310 315 320

Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser Thr  
325 330 335

Leu Ser Tyr Arg Pro Ser Asp Asn Val Ser Ser Ser Thr Lys Lys Pro  
340 345 350

Ala Pro Cys Phe Glu Val Glu  
355

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<211> 37  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Novel Sequence

<400> 101  
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<210> 102  
<211> 33  
<212> DNA  
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<220>  
<223> Novel Sequence

<400> 102  
agatcttaag aagataatta tggcaattgt gct 33

<210> 103  
<211> 62  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Novel Sequence

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ag 62

<210> 104  
<211> 62  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Novel Sequence

Aren7US29CON.txt

<400> 104  
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cg 62

<210> 105  
<211> 1083  
<212> DNA  
<213> Homo sapiens

<400> 105  
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gtgggaatat ttggaaacag cttgggtggg atagtcattt acttttatat gaagctgaag 180  
actgtggcca gtgtttttct tttgaattta gcactggctg acttatgctt tttactgact 240  
ttgccactat gggctgtcta cacagctatg gaataccgct ggcccttttg caattaccta 300  
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ttgccagcta taatccatcg aaatgtattt ttcattgaga acaccaatat tacagtttgt 540  
gctttccatt atgagtccca aaattcaacc cttccgatag ggctgggcct gaccaaaaat 600  
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ataattatgg cagcaattgt gcttttcttt ttcttttcct ggattcccca ccaaattattc 780  
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cttttttatg gcttttctggg gaaaaaattt aaaagatatt ttctccagct tctaaaatat 960  
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tga - 1083

<210> 106  
<211> 360  
<212> PRT  
<213> Homo sapiens

<400> 106

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20 25 30

Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu  
35 40 45

Aren7US29CON.txt

Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser  
 50 55 60  
 Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr  
 65 70 75 80  
 Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe  
 85 90 95  
 Gly Asn Tyr Leu Cys Lys Ile Ala Ser Ala Ser Val Ser Phe Asn Leu  
 100 105 110  
 Tyr Ala Ser Val Phe Leu Leu Thr Cys Leu Ser Ile Asp Arg Tyr Leu  
 115 120 125  
 Ala Ile Val His Pro Met Lys Ser Arg Leu Arg Arg Thr Met Leu Val  
 130 135 140  
 Ala Lys Val Thr Cys Ile Ile Ile Trp Leu Leu Ala Gly Leu Ala Ser  
 145 150 155 160  
 Leu Pro Ala Ile Ile His Arg Asn Val Phe Phe Ile Glu Asn Thr Asn  
 165 170 175  
 Ile Thr Val Cys Ala Phe His Tyr Glu Ser Gln Asn Ser Thr Leu Pro  
 180 185 190  
 Ile Gly Leu Gly Leu Thr Lys Asn Ile Leu Gly Phe Leu Phe Pro Phe  
 195 200 205  
 Leu Ile Ile Leu Thr Ser Tyr Thr Leu Ile Trp Lys Ala Leu Lys Lys  
 210 215 220  
 Ala Tyr Glu Ile Gln Lys Asn Lys Pro Arg Asn Asp Asp Ile Phe Lys  
 225 230 235 240  
 Ile Ile Met Ala Ala Ile Val Leu Phe Phe Phe Phe Ser Trp Ile Pro  
 245 250 255  
 His Gln Ile Phe Thr Phe Leu Asp Val Leu Ile Gln Leu Gly Ile Ile  
 260 265 270  
 Arg Asp Cys Arg Ile Ala Asp Ile Val Asp Thr Ala Met Pro Ile Thr  
 275 280 285  
 Ile Cys Ile Ala Tyr Phe Asn Asn Cys Leu Asn Pro Leu Phe Tyr Gly  
 290 295 300  
 Phe Leu Gly Lys Lys Phe Lys Arg Tyr Phe Leu Gln Leu Leu Lys Tyr  
 305 310 315 320  
 Ile Pro Pro Lys Ala Lys Ser His Ser Asn Leu Ser Thr Lys Met Ser  
 Page 68

325

Aren7US29CON.txt  
330

335

Thr Leu Ser Tyr Arg Pro Ser Asp Asn Val Ser Ser Ser Thr Lys Lys  
 340 345 350

Pro Ala Pro Cys Phe Glu Val Glu  
 355 360

<210> 107  
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 <212> DNA  
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<220>  
 <223> Novel Sequence

<400> 107  
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<210> 108  
 <211> 38  
 <212> DNA  
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<220>  
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<400> 108  
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<210> 109  
 <211> 39  
 <212> DNA  
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<220>  
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<400> 109  
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<210> 110  
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<400> 110  
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<210> 111  
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 <212> DNA  
 <213> Homo sapiens

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ccccctcgca ttcgcggagc cgggacacga gaattggagc tggccattag aatcactctt 180  
 Page 69

Aren7US29CON.txt

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<400> 112

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Pro Gly Ala Ser Leu Cys Arg Pro Gly Ala Pro Leu Leu Asn Ser Ser  
 20 25 30

Ser Val Gly Asn Leu Ser Cys Glu Pro Pro Arg Ile Arg Gly Ala Gly  
 35 40 45

Thr Arg Glu Leu Glu Leu Ala Ile Arg Ile Thr Leu Tyr Ala Val Ile  
 50 55 60

Phe Leu Met Ser Val Gly Gly Asn Met Leu Ile Ile Val Val Leu Gly  
 65 70 75 80

Leu Ser Arg Arg Leu Arg Thr Val Thr Asn Ala Phe Leu Leu Ser Leu  
 Page 70

Ala Val Ser Asp Leu Leu Leu Ala Val Ala Cys Met Pro Phe Thr Leu  
 100 105 110  
 Leu Pro Asn Leu Met Gly Thr Phe Ile Phe Gly Thr Val Ile Cys Lys  
 115 120 125  
 Ala Val Ser Tyr Leu Met Gly Val Ser Val Ser Val Ser Thr Leu Ser  
 130 135 140  
 Leu Val Ala Ile Ala Leu Glu Arg Tyr Ser Ala Ile Cys Arg Pro Leu  
 145 150 155 160  
 Gln Ala Arg Val Trp Gln Thr Arg Ser His Ala Ala Arg Val Ile Val  
 165 170 175  
 Ala Thr Trp Leu Leu Ser Gly Leu Leu Met Val Pro Tyr Pro Val Tyr  
 180 185 190  
 Thr Val Val Gln Pro Val Gly Pro Arg Val Leu Gln Cys Val His Arg  
 195 200 205  
 Trp Pro Ser Ala Arg Val Arg Gln Thr Trp Ser Val Leu Leu Leu Leu  
 210 215 220  
 Leu Leu Phe Phe Ile Pro Gly Val Val Met Ala Val Ala Tyr Gly Leu  
 225 230 235 240  
 Ile Ser Arg Glu Leu Tyr Leu Gly Leu Arg Phe Asp Gly Asp Ser Asp  
 245 250 255  
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 260 265 270  
 Val His Gln Asn Gly Arg Cys Arg Pro Glu Thr Gly Ala Val Gly Lys  
 275 280 285  
 Asp Ser Asp Gly Cys Tyr Val Gln Leu Pro Arg Ser Arg Pro Ala Leu  
 290 295 300  
 Glu Leu Thr Ala Leu Thr Ala Pro Gly Pro Gly Ser Gly Ser Arg Pro  
 305 310 315 320  
 Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val Lys Arg Met Leu Leu  
 325 330 335  
 Val Ile Val Val Leu Phe Phe Leu Cys Trp Leu Pro Val Tyr Ser Ala  
 340 345 350  
 Asn Thr Trp Arg Ala Phe Asp Gly Pro Gly Ala His Arg Ala Leu Ser  
 355 360 365

Aren7US29CON.txt

Val Ala Pro Ile Ser Phe Ile His Leu Leu Ser Tyr Ala Ser Ala Cys  
370 375 380

Val Asn Pro Leu Val Tyr Cys Phe Met His Arg Arg Phe Arg Gln Ala  
385 390 395 400

Cys Leu Glu Thr Cys Ala Arg Cys Cys Pro Arg Pro Pro Arg Ala Arg  
405 410 415

Pro Arg Ala Leu Pro Asp Glu Asp Pro Pro Thr Pro Ser Ile Ala Ser  
420 425 430

Leu Ser Arg Leu Ser Tyr Thr Thr Ile Ser Thr Leu Gly Pro Gly  
435 440 445

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<210> 114  
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<220>  
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<400> 114  
agaagcgcgt gaagcgcgtg ctgctggtga tcggt 35

<210> 115  
<211> 33  
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<400> 115  
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<210> 116  
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<212> DNA  
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<220>  
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<400> 116  
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<210> 117



<211> 30  
 <212> DNA  
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<220>  
 <223> Novel Sequence

<400> 117  
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<210> 118  
 <211> 30  
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 <211> 30  
 <212> DNA  
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<220>  
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<400> 119  
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<210> 120  
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<400> 120  
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<210> 121  
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<210> 122  
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<210> 123  
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 <220>  
 <223> Novel Sequence  
  
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<210> 125  
 <211> 32  
 <212> DNA  
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 <223> Novel Sequence  
  
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<210> 126  
 <211> 35  
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<210> 127  
 <211> 1296  
 <212> DNA  
 <213> Homo sapiens  
  
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 aacatcttta tctgctcctt ggcgctcagt gacctgctca tcaccttctt ctgcattccc 300  
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 gtgccatttg tccagtctac cgctgtttgt acagaaatgc tcactatgac ctgcattgct 420  
 gtggaaaggc accagggact tgtgcatcct tttaaaatga agtggcaata caccaaccga 480

Aren7US29CON.txt

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<210> 128
<211> 431
<212> PRT
<213> Homo sapiens

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<400> 128

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1           5           10          15

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Asp His Asn Leu Thr Arg Glu Gln Phe Ile Ala Leu Tyr Arg Leu Arg
20          25          30

```

```

Pro Leu Val Tyr Thr Pro Glu Leu Pro Gly Arg Ala Lys Leu Ala Leu
35          40          45

```

```

Val Leu Thr Gly Val Leu Ile Phe Ala Leu Ala Leu Phe Gly Asn Ala
50          55          60

```

```

Leu Val Phe Tyr Val Val Thr Arg Ser Lys Ala Met Arg Thr Val Thr
65          70          75          80

```

```

Asn Ile Phe Ile Cys Ser Leu Ala Leu Ser Asp Leu Leu Ile Thr Phe
85          90          95

```

```

Phe Cys Ile Pro Val Thr Met Leu Gln Asn Ile Ser Asp Asn Trp Leu
100         105         110

```

```

Gly Gly Ala Phe Ile Cys Lys Met Val Pro Phe Val Gln Ser Thr Ala
115         120         125

```

```

Val Val Thr Glu Met Leu Thr Met Thr Cys Ile Ala Val Glu Arg His
Page 75

```

130

135

Gln Gly Leu Val His Pro Phe Lys Met Lys Trp Gln Tyr Thr Asn Arg  
145 150 155 160

Arg Ala Phe Thr Met Leu Gly Val Val Trp Leu Val Ala Val Ile Val  
165 170 175

Gly Ser Pro Met Trp His Val Gln Gln Leu Glu Ile Lys Tyr Asp Phe  
180 185 190

Leu Tyr Glu Lys Glu His Ile Cys Cys Leu Glu Glu Trp Thr Ser Pro  
195 200 205

Val His Gln Lys Ile Tyr Thr Thr Phe Ile Leu Val Ile Leu Phe Leu  
210 215 220

Leu Pro Leu Met Val Met Leu Ile Leu Tyr Ser Lys Ile Gly Tyr Glu  
225 230 235 240

Leu Trp Ile Lys Lys Arg Val Gly Asp Gly Ser Val Leu Arg Thr Ile  
245 250 255

His Gly Lys Glu Met Ser Lys Ile Ala Arg Lys Lys Lys Arg Ala Lys  
260 265 270

Ile Met Met Val Thr Val Val Ala Leu Phe Ala Val Cys Trp Ala Pro  
275 280 285

Phe His Val Val His Met Met Ile Glu Tyr Ser Asn Phe Glu Lys Glu  
290 295 300

Tyr Asp Asp Val Thr Ile Lys Met Ile Phe Ala Ile Val Gln Ile Ile  
305 310 315 320

Gly Phe Ser Asn Ser Ile Cys Asn Pro Ile Val Tyr Ala Phe Met Asn  
325 330 335

Glu Asn Phe Lys Lys Asn Val Leu Ser Ala Val Cys Tyr Cys Ile Val  
340 345 350

Asn Lys Thr Phe Ser Pro Ala Gln Arg His Gly Asn Ser Gly Ile Thr  
355 360 365

Met Met Arg Lys Lys Ala Lys Phe Ser Leu Arg Glu Asn Pro Val Glu  
370 375 380

Glu Thr Lys Gly Glu Ala Phe Ser Asp Gly Asn Ile Glu Val Lys Leu  
385 390 395 400

Cys Glu Gln Thr Glu Glu Lys Lys Lys Leu Lys Arg His Leu Ala Leu  
405 410 415

Aren7US29CON.txt

Phe Arg Ser Glu Leu Ala Glu Asn Ser Pro Leu Asp Ser Gly His  
 420 425 430

<210> 129  
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 <212> DNA  
 <213> Homo sapiens

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gtgaccgctg tgtgcctgtg cctgttcgtc gtcggggtga gcggcaacgt ggtgaccgtg 180
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gccgtgtccg acctactcat cctgctcggg ctgccgttcg acctgtaccg cctctggcgc 300
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tgccgcccgc tccgcgcccg cgtcttggtc acccggcgcc gcgtccgcgc gctcatcgct 480
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tcctgtcccc caggagctct gggggacccc agggcgcttt gaggggtggg tccccggatc 1140
cgattcagta accagcagtg cttttccaga gcctctgaga ccagaaagga gagttggtaa 1200
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Aren7US29CON.txt

cagtacttta acatcgtcgc tctgcaactt ttctatctga gcgcatctat caacccaatc 1860  
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aagtccaggc cgagaggctt ccacagaagc agggacactg cgggggaagt tgcaggggac 1980  
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<210> 130  
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<212> PRT  
<213> Homo sapiens

<400> 130

Met Gly Ser Pro Trp Asn Gly Ser Asp Gly Pro Glu Gly Ala Arg Glu  
1 5 10 15

Pro Pro Trp Pro Ala Leu Pro Pro Cys Asp Glu Arg Arg Cys Ser Pro  
20 25 30

Phe Pro Leu Gly Ala Leu Val Pro Val Thr Ala Val Cys Leu Cys Leu  
35 40 45

Phe Val Val Gly Val Ser Gly Asn Val Val Thr Val Met Leu Ile Gly  
50 55 60

Arg Tyr Arg Asp Met Arg Thr Thr Thr Asn Leu Tyr Leu Gly Ser Met  
65 70 75 80

Ala Val Ser Asp Leu Leu Ile Leu Leu Gly Leu Pro Phe Asp Leu Tyr  
85 90 95

Arg Leu Trp Arg Ser Arg Pro Trp Val Phe Gly Pro Leu Leu Cys Arg  
100 105 110

Leu Ser Leu Tyr Val Gly Glu Gly Cys Thr Tyr Ala Thr Leu Leu His  
115 120 125

Met Thr Ala Leu Ser Val Glu Arg Tyr Leu Ala Ile Cys Arg Pro Leu  
130 135 140

Arg Ala Arg Val Leu Val Thr Arg Arg Arg Val Arg Ala Leu Ile Ala  
145 150 155 160

Val Leu Trp Ala Val Ala Leu Leu Ser Ala Gly Pro Phe Leu Phe Leu  
165 170 175

Val Gly Val Glu Gln Asp Pro Gly Ile Ser Val Val Pro Gly Leu Asn  
180 185 190

Gly Thr Ala Arg Ile Ala Ser Ser Pro Leu Ala Ser Ser Pro Pro Leu  
195 200 205

Trp Leu Ser Arg Ala Pro Pro Pro Ser Pro Pro Ser Gly Pro Glu Thr  
Page 78

210

215

Ala Glu Ala Ala Ala Leu Phe Ser Arg Glu Cys Arg Pro Ser Pro Ala  
225 230 235 240  
Gln Leu Gly Ala Leu Arg Val Met Leu Trp Val Thr Thr Ala Tyr Phe  
245 250 255  
Phe Leu Pro Phe Leu Cys Leu Ser Ile Leu Tyr Gly Leu Ile Gly Arg  
260 265 270  
Glu Leu Trp Ser Ser Arg Arg Pro Leu Arg Gly Pro Ala Ala Ser Gly  
275 280 285  
Arg Glu Arg Gly His Arg Gln Thr Lys Arg Val Leu Leu Val Val Val  
290 295 300  
Leu Ala Phe Ile Ile Cys Trp Leu Pro Phe His Val Gly Arg Ile Ile  
305 310 315 320  
Tyr Ile Asn Thr Glu Asp Ser Arg Met Met Tyr Phe Ser Gln Tyr Phe  
325 330 335  
Asn Ile Val Ala Leu Gln Leu Phe Tyr Leu Ser Ala Ser Ile Asn Pro  
340 345 350  
Ile Leu Tyr Asn Leu Ile Ser Lys Lys Tyr Arg Ala Ala Ala Phe Lys  
355 360 365  
Leu Leu Leu Ala Arg Lys Ser Arg Pro Arg Gly Phe His Arg Ser Arg  
370 375 380  
Asp Thr Ala Gly Glu Val Ala Gly Asp Thr Gly Gly Asp Thr Val Gly  
385 390 395 400  
Tyr Thr Glu Thr Ser Ala Asn Val Lys Thr Met Gly  
405 410

<210> 131  
<211> 1344  
<212> DNA  
<213> Homo sapiens

<400> 131  
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ctgagccgcc gcctgaggac tgtcaccaat gccttcttcc tctcactggc agtcagcgac 300  
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atctttggca ccgtcatctg caaggcgggt tcctacctca tgggggtgtc tgtgagtgtg 420

Aren7US29CON.txt

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cggcctgccc tggagctgac ggcgctgacg gctcctgggc cgggatccgg ctcccggccc 960
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<210> 132  
 <211> 447  
 <212> PRT  
 <213> Homo sapiens

<400> 132

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 1 5 10 15

Pro Gly Ala Ser Leu Cys Arg Pro Gly Ala Pro Leu Leu Asn Ser Ser  
 20 25 30

Ser Val Gly Asn Leu Ser Cys Glu Pro Pro Arg Ile Arg Gly Ala Gly  
 35 40 45

Thr Arg Glu Leu Glu Leu Ala Ile Arg Ile Thr Leu Tyr Ala Val Ile  
 50 55 60

Phe Leu Met Ser Val Gly Gly Asn Met Leu Ile Ile Val Val Leu Gly  
 65 70 75 80

Leu Ser Arg Arg Leu Arg Thr Val Thr Asn Ala Phe Leu Leu Ser Leu  
 85 90 95

Ala Val Ser Asp Leu Leu Leu Ala Val Ala Cys Met Pro Phe Thr Leu  
 100 105 110

Leu Pro Asn Leu Met Gly Thr Phe Ile Phe Gly Thr Val Ile Cys Lys  
 Page 80



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115              120              125
Ala Val Ser Tyr Leu Met Gly Val Ser Val Ser Val Ser Thr Leu Ser
130              135              140
Leu Val Ala Ile Ala Leu Glu Arg Tyr Ser Ala Ile Cys Arg Pro Leu
145              150              155
Gln Ala Arg Val Trp Gln Thr Arg Ser His Ala Ala Arg Val Ile Val
165              170              175
Ala Thr Trp Leu Leu Ser Gly Leu Leu Met Val Pro Tyr Pro Val Tyr
180              185              190
Thr Val Val Gln Pro Val Gly Pro Arg Val Leu Gln Cys Val His Arg
195              200              205
Trp Pro Ser Ala Arg Val Arg Gln Thr Trp Ser Val Leu Leu Leu Leu
210              215              220
Leu Leu Phe Phe Ile Pro Gly Val Val Met Ala Val Ala Tyr Gly Leu
225              230              235
Ile Ser Arg Glu Leu Tyr Leu Gly Leu Arg Phe Asp Gly Asp Ser Asp
245              250              255
Ser Asp Ser Gln Ser Arg Val Arg Asn Gln Gly Gly Leu Pro Gly Ala
260              265              270
Val His Gln Asn Gly Arg Cys Arg Pro Glu Thr Gly Ala Val Gly Lys
275              280              285
Asp Ser Asp Gly Cys Tyr Val Gln Leu Pro Arg Ser Arg Pro Ala Leu
290              295              300
Glu Leu Thr Ala Leu Thr Ala Pro Gly Pro Gly Ser Gly Ser Arg Pro
305              310              315
Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val Lys Arg Met Leu Leu
325              330              335
Val Ile Val Val Leu Phe Phe Leu Cys Trp Leu Pro Val Tyr Ser Ala
340              345              350
Asn Thr Trp Arg Ala Phe Asp Gly Pro Gly Ala His Arg Ala Leu Ser
355              360              365
Val Ala Pro Ile Ser Phe Ile His Leu Leu Ser Tyr Ala Ser Ala Cys
370              375              380
Val Asn Pro Leu Val Tyr Cys Phe Met His Arg Arg Phe Arg Gln Ala
385              390              395              400

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Aren7US29CON.txt

Cys Leu Glu Thr Cys Ala Arg Cys Cys Pro Arg Pro Pro Arg Ala Arg  
405 410 415

Pro Arg Ala Leu Pro Asp Glu Asp Pro Pro Thr Pro Ser Ile Ala Ser  
420 425 430

Leu Ser Arg Leu Ser Tyr Thr Thr Ile Ser Thr Leu Gly Pro Gly  
435 440 445

<210> 133  
<211> 1014  
<212> DNA  
<213> Homo sapiens

<400> 133  
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ctgcaagcaa agaaggaaag tgaactagga atttacctct tcagtttgtc actatcagat 180  
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actttctctc ctgccttggc caaagggagt gcttttctca tgtacatgaa tttttacagc 300  
agcacagcat tcctcacctg cattgccgtt gatcgggtatt tggctgttgt ctaccctttg 360  
aagttttttt tcctaaggac aagaagattt gcactcatgg tcagcctgtc catctggata 420  
ttggaaacca tcttcaatgc tgtcatgttg tgggaagatg aaacagttgt tgaatattgc 480  
gatgccgaaa agtctaattt tactttatgc tatgacaaat accctttaga gaaatggcaa 540  
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cacagcaatt ctgggaagcg aacttacaca atgtatagaa tcacggttgc attaacaagt 840  
ttaaattgtg ttgctgatcc aattctgtac tgttttgtta ccgaaacagg aagatatgat 900  
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cgcatacttt ctgtgtctac aaaagatact atggaattag aggtccttga gtag 1014

<210> 134  
<211> 337  
<212> PRT  
<213> Homo sapiens

<400> 134

Met Asn Ser Thr Cys Ile Glu Glu Gln His Asp Leu Asp His Tyr Leu  
1 5 10 15

Phe Pro Ile Val Tyr Ile Phe Val Ile Ile Val Ser Ile Pro Ala Asn  
20 25 30

Ile Gly Ser Leu Cys Val Ser Phe Leu Gln Ala Lys Lys Glu Ser Glu  
Page 82

35

40

45

Leu Gly Ile Tyr Leu Phe Ser Leu Ser Leu Ser Asp Leu Leu Tyr Ala  
50 55 60

Leu Thr Leu Pro Leu Trp Ile Asp Tyr Thr Trp Asn Lys Asp Asn Trp  
65 70 75 80

Thr Phe Ser Pro Ala Leu Cys Lys Gly Ser Ala Phe Leu Met Tyr Met  
85 90 95

Asn Phe Tyr Ser Ser Thr Ala Phe Leu Thr Cys Ile Ala Val Asp Arg  
100 105 110

Tyr Leu Ala Val Val Tyr Pro Leu Lys Phe Phe Phe Leu Arg Thr Arg  
115 120 125

Arg Phe Ala Leu Met Val Ser Leu Ser Ile Trp Ile Leu Glu Thr Ile  
130 135 140

Phe Asn Ala Val Met Leu Trp Glu Asp Glu Thr Val Val Glu Tyr Cys  
145 150 155 160

Asp Ala Glu Lys Ser Asn Phe Thr Leu Cys Tyr Asp Lys Tyr Pro Leu  
165 170 175

Glu Lys Trp Gln Ile Asn Leu Asn Leu Phe Arg Thr Cys Thr Gly Tyr  
180 185 190

Ala Ile Pro Leu Val Thr Ile Leu Ile Cys Asn Arg Lys Val Tyr Gln  
195 200 205

Ala Val Arg His Asn Lys Ala Thr Glu Asn Lys Glu Lys Lys Arg Ile  
210 215 220

Lys Lys Leu Leu Val Ser Ile Thr Val Thr Phe Val Leu Cys Phe Thr  
225 230 235 240

Pro Phe His Val Met Leu Leu Ile Arg Cys Ile Leu Glu His Ala Val  
245 250 255

Asn Phe Glu Asp His Ser Asn Ser Gly Lys Arg Thr Tyr Thr Met Tyr  
260 265 270

Arg Ile Thr Val Ala Leu Thr Ser Leu Asn Cys Val Ala Asp Pro Ile  
275 280 285

Leu Tyr Cys Phe Val Thr Glu Thr Gly Arg Tyr Asp Met Trp Asn Ile  
290 295 300

Leu Lys Phe Cys Thr Gly Arg Cys Asn Thr Ser Gln Arg Gln Arg Lys  
305 310 315 320

Aren7US29CON.txt

Arg Ile Leu Ser Val Ser Thr Lys Asp Thr Met Glu Leu Glu Val Leu  
 325 330 335

Glu

<210> 135  
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 <212> DNA  
 <213> Homo sapiens

<400> 135  
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 tacgagcaac tttttgtctc tcctgagggtg tttgtgactc tgggtgtcat cagcttggtg 180  
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 ttcttcacca tgctggctct catggcttct ctctatgtcc acatgttcct gatggccagg 660  
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 atgaagggaa aaattacctt gaccatcctg attggcgtct ttgttgtctg ctggggcccca 780  
 ttcttcctcc acttaatat ctacatctct tgtcctcaga atccatattg tgtgtgcttc 840  
 atgtctcact ttaacttgta tctcactg atcatgtgta attcaatcat cgatcctctg 900  
 atttatgcac tccggagtca agaactgagg aaaaccttca aagagatcat ctgttgctat 960  
 cccctgggag gcctttgtga cttgtctagc agatattaa 999

<210> 136  
 <211> 332  
 <212> PRT  
 <213> Homo sapiens

<400> 136

Met Val Asn Ser Thr His Arg Gly Met His Thr Ser Leu His Leu Trp  
 1 5 10 15

Asn Arg Ser Ser Tyr Arg Leu His Ser Asn Ala Ser Glu Ser Leu Gly  
 20 25 30

Lys Gly Tyr Ser Asp Gly Gly Cys Tyr Glu Gln Leu Phe Val Ser Pro  
 35 40 45

Glu Val Phe Val Thr Leu Gly Val Ile Ser Leu Leu Glu Asn Ile Leu  
 Page 84

50

55

60

Val Ile Val Ala Ile Ala Lys Asn Lys Asn Leu His Ser Pro Met Tyr  
65 70 75 80

Phe Phe Ile Cys Ser Leu Ala Val Ala Asp Met Leu Val Ser Val Ser  
85 90 95

Asn Gly Ser Glu Thr Ile Ile Ile Thr Leu Leu Asn Ser Thr Asp Thr  
100 105 110

Asp Ala Gln Ser Phe Thr Val Asn Ile Asp Asn Val Ile Asp Ser Val  
115 120 125

Ile Cys Ser Ser Leu Leu Ala Ser Ile Cys Ser Leu Leu Ser Ile Ala  
130 135 140

Val Asp Arg Tyr Phe Thr Ile Phe Tyr Ala Leu Gln Tyr His Asn Ile  
145 150 155 160

Met Thr Val Lys Arg Val Gly Ile Ser Ile Ser Cys Ile Trp Ala Ala  
165 170 175

Cys Thr Val Ser Gly Ile Leu Phe Ile Ile Tyr Ser Asp Ser Ser Ala  
180 185 190

Val Ile Ile Cys Leu Ile Thr Met Phe Phe Thr Met Leu Ala Leu Met  
195 200 205

Ala Ser Leu Tyr Val His Met Phe Leu Met Ala Arg Leu His Ile Lys  
210 215 220

Arg Ile Ala Val Leu Pro Gly Thr Gly Ala Ile Arg Gln Gly Ala Asn  
225 230 235 240

Met Lys Gly Lys Ile Thr Leu Thr Ile Leu Ile Gly Val Phe Val Val  
245 250 255

Cys Trp Ala Pro Phe Phe Leu His Leu Ile Phe Tyr Ile Ser Cys Pro  
260 265 270

Gln Asn Pro Tyr Cys Val Cys Phe Met Ser His Phe Asn Leu Tyr Leu  
275 280 285

Ile Leu Ile Met Cys Asn Ser Ile Ile Asp Pro Leu Ile Tyr Ala Leu  
290 295 300

Arg Ser Gln Glu Leu Arg Lys Thr Phe Lys Glu Ile Ile Cys Cys Tyr  
305 310 315 320

Pro Leu Gly Gly Leu Cys Asp Leu Ser Ser Arg Tyr  
325 330

<210> 137  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Novel Sequence

<400> 137  
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<210> 138  
 <211> 31  
 <212> DNA  
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<220>  
 <223> Novel Sequence

<400> 138  
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<210> 139  
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Aren7US29CON.txt

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<211> 613  
<212> PRT  
<213> Homo sapiens

<400> 140

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Cys Ala Met Val Ile Thr Ile Val Val Asp Leu Ile Gly Asn Ser Met  
35 40 45

Val Ile Leu Ala Val Thr Lys Asn Lys Lys Leu Arg Asn Ser Gly Asn  
50 55 60

Ile Phe Val Val Ser Leu Ser Val Ala Asp Met Leu Val Ala Ile Tyr  
65 70 75 80

Pro Tyr Pro Leu Met Leu His Ala Met Ser Ile Gly Gly Trp Asp Leu  
85 90 95

Ser Gln Leu Gln Cys Gln Met Val Gly Phe Ile Thr Gly Leu Ser Val  
100 105 110

Val Gly Ser Ile Phe Asn Ile Val Ala Ile Ala Ile Asn Arg Tyr Cys  
115 120 125

Tyr Ile Cys His Ser Leu Gln Tyr Glu Arg Ile Phe Ser Val Arg Asn  
130 135 140

Thr Cys Ile Tyr Leu Val Ile Thr Trp Ile Met Thr Val Leu Ala Val  
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Aren7US29CON.txt

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 Thr Cys Ile Phe Asn Tyr Leu Asn Asn Pro Val Phe Thr Val Thr Ile  
 180 185 190  
 Val Cys Ile His Phe Val Leu Pro Leu Leu Ile Val Gly Phe Cys Tyr  
 195 200 205  
 Val Arg Ile Trp Thr Lys Val Leu Ala Ala Arg Asp Pro Ala Gly Gln  
 210 215 220  
 Asn Pro Asp Asn Gln Leu Ala Glu Val Arg Asn Phe Leu Thr Met Phe  
 225 230 235 240  
 Val Ile Phe Leu Leu Phe Ala Val Cys Trp Cys Pro Ile Asn Val Leu  
 245 250 255  
 Thr Val Leu Val Ala Val Ser Pro Lys Glu Met Ala Gly Lys Ile Pro  
 260 265 270  
 Asn Trp Leu Tyr Leu Ala Ala Tyr Phe Ile Ala Tyr Phe Asn Ser Cys  
 275 280 285  
 Leu Asn Ala Val Ile Tyr Gly Leu Leu Asn Glu Asn Phe Arg Arg Glu  
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 Tyr Trp Thr Ile Phe His Ala Met Arg His Pro Ile Ile Phe Phe Pro  
 305 310 315 320  
 Gly Leu Ile Ser Asp Ile Arg Glu Met Gln Glu Ala Arg Thr Leu Ala  
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 Arg Ala Arg Ala His Ala Arg Asp Gln Ala Arg Glu Gln Asp Arg Ala  
 340 345 350  
 His Ala Cys Pro Ala Val Glu Glu Thr Pro Met Asn Val Arg Asn Val  
 355 360 365  
 Pro Leu Pro Gly Asp Ala Ala Ala Gly His Pro Asp Arg Ala Ser Gly  
 370 375 380  
 His Pro Lys Pro His Ser Arg Ser Ser Ser Ala Tyr Arg Lys Ser Ala  
 385 390 395 400  
 Ser Thr His His Lys Ser Val Phe Ser His Ser Lys Ala Ala Ser Gly  
 405 410 415  
 His Leu Lys Pro Val Ser Gly His Ser Lys Pro Ala Ser Gly His Pro  
 420 425 430  
 Lys Ser Ala Thr Val Tyr Pro Lys Pro Ala Ser Val His Phe Lys Gly  
 Page 88



435

440

Asp Ser Val His Phe Lys Gly Asp Ser Val His Phe Lys Pro Asp Ser  
450 455 460

Val His Phe Lys Pro Ala Ser Ser Asn Pro Lys Pro Ile Thr Gly His  
465 470 475 480

His Val Ser Ala Gly Ser His Ser Lys Ser Ala Phe Ser Ala Ala Thr  
485 490 495

Ser His Pro Lys Pro Ile Lys Pro Ala Thr Ser His Ala Glu Pro Thr  
500 505 510

Thr Ala Asp Tyr Pro Lys Pro Ala Thr Thr Ser His Pro Lys Pro Ala  
515 520 525

Ala Ala Asp Asn Pro Glu Leu Ser Ala Ser His Cys Pro Glu Ile Pro  
530 535 540

Ala Ile Ala His Pro Val Ser Asp Asp Ser Asp Leu Pro Glu Ser Ala  
545 550 555 560

Ser Ser Pro Ala Ala Gly Pro Thr Lys Pro Ala Ala Ser Gln Leu Glu  
565 570 575

Ser Asp Thr Ile Ala Asp Leu Pro Asp Pro Thr Val Val Thr Thr Ser  
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Thr Asn Asp Tyr His Asp Val Val Val Asp Val Glu Asp Asp Pro  
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Asp Glu Met Ala Val  
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agtggtcgca atacctgcat ctacctggc atcacctgga tcatgaccgt cctggctgtc 480  
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Aren7US29CON.txt

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Cys Ala Met Val Ile Thr Ile Val Val Asp Leu Ile Gly Asn Ser Met  
 35 40 45

Val Ile Leu Ala Val Thr Lys Asn Lys Lys Leu Arg Asn Ser Gly Asn  
 50 55 60

Ile Phe Val Val Ser Leu Ser Val Ala Asp Met Leu Val Ala Ile Tyr  
 Page 90

65					70				75						80
Pro	Tyr	Pro	Leu	Met 85	Leu	His	Ala	Met	Ser 90	Ile	Gly	Gly	Trp	Asp 95	Leu
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Val	Gly	Ser 115	Ile	Phe	Asn	Ile	Val 120	Ala	Ile	Ala	Ile	Asn 125	Arg	Tyr	Cys
Tyr	Ile 130	Cys	His	Ser	Leu	Gln 135	Tyr	Glu	Arg	Ile	Phe 140	Ser	Val	Arg	Asn
Thr 145	Cys	Ile	Tyr	Leu	Val 150	Ile	Thr	Trp	Ile	Met 155	Thr	Val	Leu	Ala	Val 160
Leu	Pro	Asn	Met	Tyr 165	Ile	Gly	Thr	Ile	Glu 170	Tyr	Asp	Pro	Arg	Thr 175	Tyr
Thr	Cys	Ile	Phe 180	Asn	Tyr	Leu	Asn	Asn 185	Pro	Val	Phe	Thr	Val 190	Thr	Ile
Val	Cys	Ile 195	His	Phe	Val	Leu	Pro 200	Leu	Leu	Ile	Val	Gly 205	Phe	Cys	Tyr
Val	Arg 210	Ile	Trp	Thr	Lys	Val 215	Leu	Ala	Ala	Arg	Asp 220	Pro	Ala	Gly	Gln
Asn 225	Pro	Asp	Asn	Gln	Leu 230	Ala	Glu	Val	Arg	Asn 235	Lys	Leu	Thr	Met	Phe 240
Val	Ile	Phe	Leu	Leu 245	Phe	Ala	Val	Cys	Trp 250	Cys	Pro	Ile	Asn	Val 255	Leu
Thr	Val	Leu	Val 260	Ala	Val	Ser	Pro	Lys 265	Glu	Met	Ala	Gly	Lys 270	Ile	Pro
Asn	Trp	Leu 275	Tyr	Leu	Ala	Ala	Tyr 280	Phe	Ile	Ala	Tyr	Phe 285	Asn	Ser	Cys
Leu	Asn 290	Ala	Val	Ile	Tyr	Gly 295	Leu	Leu	Asn	Glu	Asn 300	Phe	Arg	Arg	Glu
Tyr 305	Trp	Thr	Ile	Phe	His 310	Ala	Met	Arg	His	Pro 315	Ile	Ile	Phe	Phe	Ser 320
Gly	Leu	Ile	Ser	Asp 325	Ile	Arg	Glu	Met	Gln 330	Glu	Ala	Arg	Thr	Leu 335	Ala
Arg	Ala	Arg	Ala 340	His	Ala	Arg	Asp	Gln 345	Ala	Arg	Glu	Gln	Asp 350	Arg	Ala

Aren7US29CON.txt

His Ala Cys Pro Ala Val Glu Glu Thr Pro Met Asn Val Arg Asn Val  
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Pro Leu Pro Gly Asp Ala Ala Ala Gly His Pro Asp Arg Ala Ser Gly  
370 375 380

His Pro Lys Pro His Ser Arg Ser Ser Ser Ala Tyr Arg Lys Ser Ala  
385 390 395 400

Ser Thr His His Lys Ser Val Phe Ser His Ser Lys Ala Ala Ser Gly  
405 410 415

His Leu Lys Pro Val Ser Gly His Ser Lys Pro Ala Ser Gly His Pro  
420 425 430

Lys Ser Ala Thr Val Tyr Pro Lys Pro Ala Ser Val His Phe Lys Ala  
435 440 445

Asp Ser Val His Phe Lys Gly Asp Ser Val His Phe Lys Pro Asp Ser  
450 455 460

Val His Phe Lys Pro Ala Ser Ser Asn Pro Lys Pro Ile Thr Gly His  
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His Val Ser Ala Gly Ser His Ser Lys Ser Ala Phe Asn Ala Ala Thr  
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Ser His Pro Lys Pro Ile Lys Pro Ala Thr Ser His Ala Glu Pro Thr  
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Thr Ala Asp Tyr Pro Lys Pro Ala Thr Thr Ser His Pro Lys Pro Ala  
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Ala Ala Asp Asn Pro Glu Leu Ser Ala Ser His Cys Pro Glu Ile Pro  
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Asp Glu Met Ala Val  
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